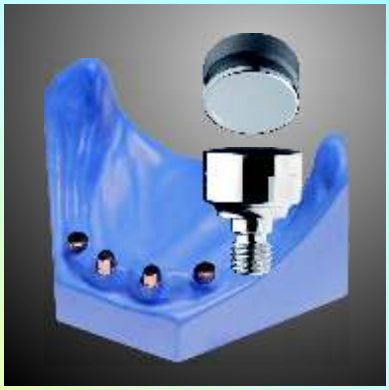
Product catalog

steco system-technik



Titanmagnetics®

coOrdination®

IMAGO®

Edition 04.2011

APPROVAL

EC Directive 93/42/EEC Annex II, Article 3
Full Quality Assurance System
Medical Devices

Registration No.: HD 60015277 0001

Report No.: 21124432 002

Manufacturer:
steco-system-technik
GmbH & Co. KG
Kollaustr. 6
22529 Hamburg
Deutschland

Scope:
Design and development, production and sales of attachments for dental, oral, gnatho and facial medical science and implantable port systems

Products: see attachment
Production facility: see attachment
Replaces Approval, Registration No.: HD 60003023 0001

Date of Expiry: 15.07.2011

The Notified Body hereby authorizes the quality management system established and applied by the company mentioned above. The requirements of Annex II, Article 3 of the directive have been met. This approval is subject to periodic surveillance, defined by Annex II, Article 5 of the aforementioned EC Directive, and can be used by the company with the manufacturer's declaration of conformity.

Notified Body

Cologne, 30.01.2007

Dipl.-Ing. I. Munkler

TÜV Rheinland Product Safety GmbH - Zertifizierungsstelle - TÜV Rheinland

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln
Accredited by Zentralstelle der Länder für Sicherheitstechnik (ZLS) and
Zentralstelle der Länder für Gesundheitsschutz bei Arzneimitteln und Medizinprodukten (ZLG).

Notified under No. 0197 to the EC Commission.

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE

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Safety, liability and warranty
Steco®-Titanmagnetics® must be used only with original components and instruments supplied by the steco-system-technik GmbH & Co. KG. Please comply with the instructions for use and the product data sheet. We assume no liability for warranty or product performance if other components manufactured by a third party are used, as product function can be compromised. The technical advice supplied in relation to the use of our products is based on state-of-the-art science and technology valid at the time of product launch.
Advice is given verbally, in writing, via electronic media or through demonstrations by our trained medical device consultant. Nevertheless, this does not exempt the user from the obligation of personally testing the product to ensure that it is suitable for the intended purposes/procedures. The user is also obliged to keep up to date with Steco products (e.g. via visiting our website at www.steco.de) and find out information relating to product application. This applies especially for techniques that have not been expressly recommended. In cases of doubt, users should contact steco-system-technik GmbH & Co. KG.
The user is solely responsible for product processing and application as this is beyond our control. We assume no liability for any damage arising during processing and application. In the case of intra-oral application, our products must generally be safeguarded against aspiration.
We guarantee the perfect quality of our products within the framework of our general terms and conditions. Information relating to the existence of patents, trade names or other Intangible asset legislation are legally non-binding.

Please note
We urgently recommend that you receive instruction in the handling of our products from an experienced user. Steco products should only be used by doctors, dentists, surgeons, dental technicians and anaplastologists who are familiar with the system.

Validity
The publication of the 04.2011 catalogue invalidates all previous information.

Sale, availability
Our products are sold only to dentists, doctors, surgeons, clinicians, dental laboratories and anaplastologists or to persons acting on their behalf. Not all components are universally available.
Other trademarks, especially in conjunction with the names of implants, are used regardless of their unconditional availability. The specified product names are the trademarks of the respective manufacturers. Titanmagnetics®, coOrdination®, IMAGO® and Steco® are listed trademarks of steco-system-technik.

Packaging unit
Unless specified otherwise, each pack contains 1 unit.

Copyright
Re-print or publication, also in extracts, is permitted only with the written approval of steco-system-technik GmbH & Co. KG, 22529 Hamburg, Germany and specimen copy.

Explanation of symbols on labels and product data sheets (DIN EN 980)

SN	Serial number
LOT	Batch Code (Lot number)
REF	Product number
non sterile	Unsterile
	Do not reuse!
	Caution, Consult accompanying documents
	Caution, Magnetic field
250 °C 480 °F [Titanmagnetics®]	Upper limit of temperature
04/11	Date of manufacture (MM/YY)
CE 0197	Authorized representative within the EC: steco-system-technik GmbH & Co. KG 22529 Hamburg, GERMANY

It's so easy to order by us!

Consultation and order
by our trained medical devices consultant from monday to thursday from 8:00 a.m. to 6:00 p.m. and friday to 5:30 p.m. at the following telephone number

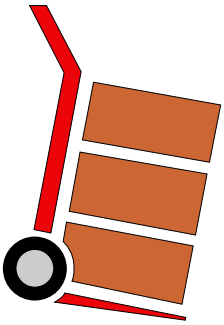
+49 (0)40 55 77 81-0

Out of our business times you can give your order by mailbox/voice, by telefax or by e-mail! Our distribution is responsible for germany. Our distributor partner in switzerland is Kaladent AG, in austria ZPP Dental-Agentur. Ask us for other foreign distributors.

Customer No.:

Your customer number facilitates the coverage of your order!

You decide, how fast we deliver!



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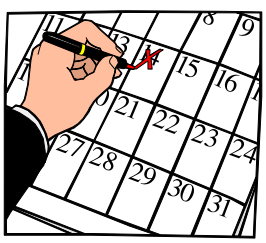


- During 14 days
- Pre-Announcement by telephone or e-mail
- Only in undamaged packaging
- Please fill in the slip of return
- Please take absolute a **padded envelope** or a board
- In case of losing products due to uncorrect packaging, we cannot give a credit

Headquarter Hamburg

Branch office Lemgo

Award delivery “Land of Ideas”

111 years dental technology

Steco products are world leaders in terms of processing, product characteristics and patient benefits. We will also maintain this level in future by means of a high innovation potential also for individual tailor-made solutions on-going subsequent development and by making changes and optimising function in accordance with requirements. We can guarantee this with a clear conscience.

Steco products meet the highest requirements in all concerns. The products are manufactured predominantly in our branch in Lemgo. The use of the high quality materials, technologies and modern measuring and analysis tools will satisfy all requirements.

Steco products are manufactured under constant quality standard for dental, medical and industrial applications. The main business comprises anti-corrosive magnet applications, highprecision CNC turning techniques and material comprehensive laser techniques.

We are certified in accordance with QM standard EN ISO 13485:2000 and EN ISO 9001:2000 Quality management systems for medical devices. The medical devices bear the CE label. For the US market a permission exists, in Japan we are registered as manufacturers of medicine products.
Our certificates can be viewed on the Internet platform **www.TUVdotCOM.de**. The platform is available for all users and patients and guarantee transparency and confidence in our quality policy.

Visit the current internet page **www.steco.de** for further information.

steco-system-technik GmbH & Co. KG was established in 1996. The company is owned by economist and dental technician Hjalmar Stemmann and master dental technician and inventor Hartmut Stemmann. Sales, administration, training and quality management are based at the company's headquarters in Hamburg whilst the Lemgo subsidary houses the development and production departments.

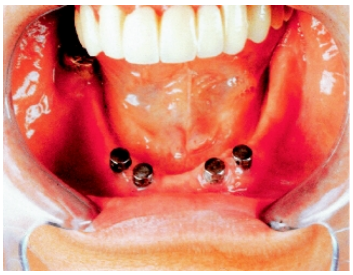
Steco received numerous honors.

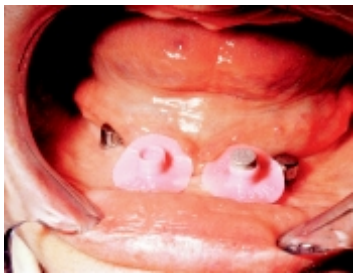
1994 2nd innovative award by the Senate of the free and hanseatic city of Hamburg
1994 Prof.-Adalbert-Seifritz award of the association “Technologie-Transfer Handwerk” (together with Prof. Dr. Dr. Schmelzle)
1997 Honorary membership for Hartmut Stemmann due to innovative an successful development, particulary on the sector of the magnet prosthetics of the “Council of dental Technology, Germany”.
2002 ZTM Hartmut Stemmann awards for his research and development within the dental technology the recognised Straumann award for advancements of the dental technology
2007 “Selected Landmark 2007 in the Land of Ideas”

Germany
Land of Ideas

2007 Awards for it’s life’s work of master dental technician Hartmut Stemmann by the “Council of dental Technology, Germany”.
2008 Steco ist admitted, as the first manufacturer of dental device, to the quality group of environmentally conscious enterprises by the environmental senator of Hamburg Axel Gedaschko. Steco becomes a member of the environmental partnership Hamburg, at the same time.

Introduction





Steco®-Titanmagnetics® are based on the bi-magnet principle: an active magnet is positioned in the implant or in the root cap, and the active correspondent (counter) magnet in the denture. This ensures that the denture is automatically centred and protects the jaw and implant against non-physiological forces.

The magnet cells made of samarium-cobalt (Sm_2Co_{17}) are completely covered in titanium and are gastight. This provides long-term protection against corrosion. Titanmagnetics® are resistant to long-term temperatures of up to 250° C and can easily be sterilised.

The insert is applied directly on the exposed implants. Titanmagnetics® are available with an integrated, variable height distancing sleeve that can be adjusted according to the height of the gums. Custom-made device are obviously available.

Titanmagnetics® are available for over 50 implant systems. These include all leading systems such as Ankylos, BPI, Brånemark, Camlog, 3i, Frialit-2, Impla, IMZ, IQ:Nect, MicroPlant, Semados, SIC, Straumann, tiologic, ZL-Microdent and further more. We provide user-specific seminars and hands-on workshops for dentists and dental technicians at our “forum dental" training centre.
The Titanmagnetics® system consists of:

- An implant insert or root cap magnet made from titanium (primary magnet)
- An opposing (counter) magnet for the denture or facial prosthesis made from titanium (secondary magnet)
- System-specific titanium accessories such as:
  - torque wrench insert (with magnet cell)
  - impression post (with magnet cell)
  - laboratory replica for dental technicians (with magnet cell)
  - positioning cuff (dental silicon)
  - resilience ring for K-Line (titanium)

Titanmagnetics® can be used in hybrid prosthodontics on implants and root caps, in defect prosthetics for obturator coupling and to attach the facial prosthesis to craniofacials implants as well as for other attachment purposes. The different product lines can be combined. The X, Z and K product lines can be used intra- and extra-orally. The T product line is available solely for extra-oral application.

Our products are reliable. As a result, we can make you a promise that you don't find everywhere: Comply with the terms of our warranty, and we will guarantee the trouble-free functionality of Steco®-Titanmagnetics® for 5 years.

1. Titanmagnetics® are used to anchor the dental prosthesis to implants and/or root caps in patients who have very few teeth or none at all.
   a) At least four implants should be used in the lower jaw. If only two implants are inserted, then only spherical Titanmagnetics® in the X- or Z-Line are to be used.
   b) At least four implants should be inserted in the upper jaw. It is not advisable to use less than three implants.
   c) With sufficient parallelism (Divergence < 15°) of four or more implants conical magnet posts of the K-Line can be used.
   d) Alternatively in each case two conical (K-Line, mostly medial) and two spherical (X- or Z-Line, mostly distal) Titanmagnetics can be combined with at least four implants.
   e) A model-casting base to guard against rupture is recommended.

2. Titanmagnetics® can be used likewise for the anchorage of dentures on root caps. For this supply the product lines X- and K-Line are available.

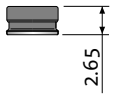
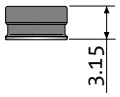
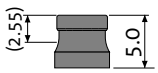
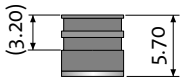
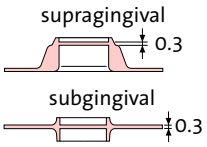
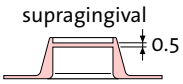
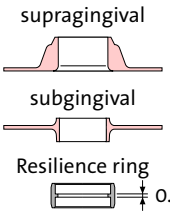
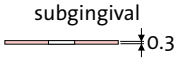
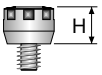
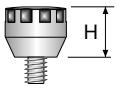
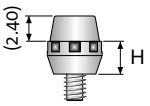
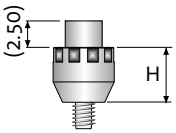
3. Titanmagnetics® are used to connect separated (hollow) obturators.

4. Titanmagnetics® are used to attach facial prostheses to implants or to other prosthetic accessories (e.g. obturators). Titanmagnetics® in the facial prosthetics find you starting from page 42.

5. Titanmagnetics® can be directly incorporated in available prosthesis (chairside) as well as in new preparations (labside).

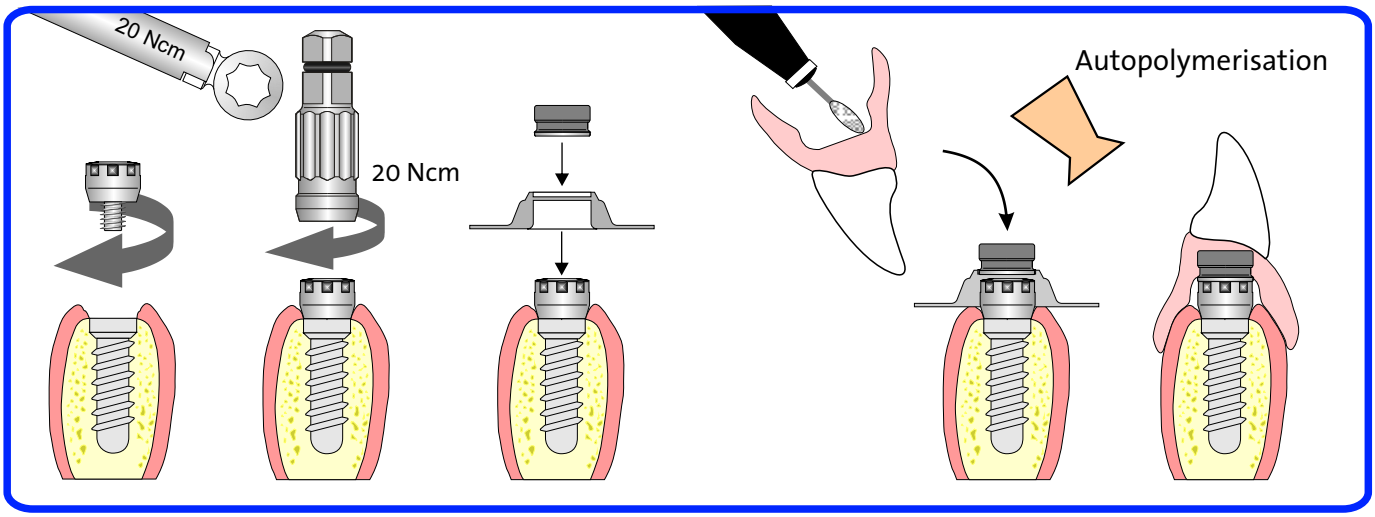
Magnet abutments and denture magnets must be removed before performing MRI diagnoses (Magnetic Resonance Imaging). This indication must be absolutely passed on to the patient.

Information to dimensions and withdrawal force of the different product lines

Product line / Characteristic	X-Line	Z-Line	K-Line	T-Line*
Head diameter [mm]	**4.8**	**5.8**	**5.2**	**5.8**
Titanmagnetics® denture magnet				
Dimensions of magnet core [mm]	**ø 4 x 2**	**ø 5 x 2.5**	**ø 4 x 2**	**ø 3 x 2**
Titanmagnetics® positioning cuff				
Titanmagnetics® resilience ring				
Titanmagnetics® insert H = Height				
Dimensons of the magnet core [mm]	**ø 4 x 2**	**ø 5 x 2.5**	**ø 3,5 x 2.5**	**ø 3 x 4**
Average withdrawal force of a magnetpair in Newton (equivalent in gram)	**1.6 N** (163 g)	**3.0 N** (306 g)	**1.6 N** (163 g)	**1.4 N** (143 g)
Roughness of the polished titanium-surface average roughness depth R_z	**0.5 - 0.6 µm**			
Magnet core	**Sm_2Co_{17}, titanium-covers gastightly-welded**			
Housing	**Pure titanium according to DIN 17850 (Ti4) / ASTM F 67 (Grade 4)**			
Sterilization	**Steam sterilization in the autoclave (e.g. 134°C, 3 bar, 5 minutes).** Please refer also to the manufacturer's user manual and use validated processes only.			

All measure data are in mm.
*Only for facial prosthetics!

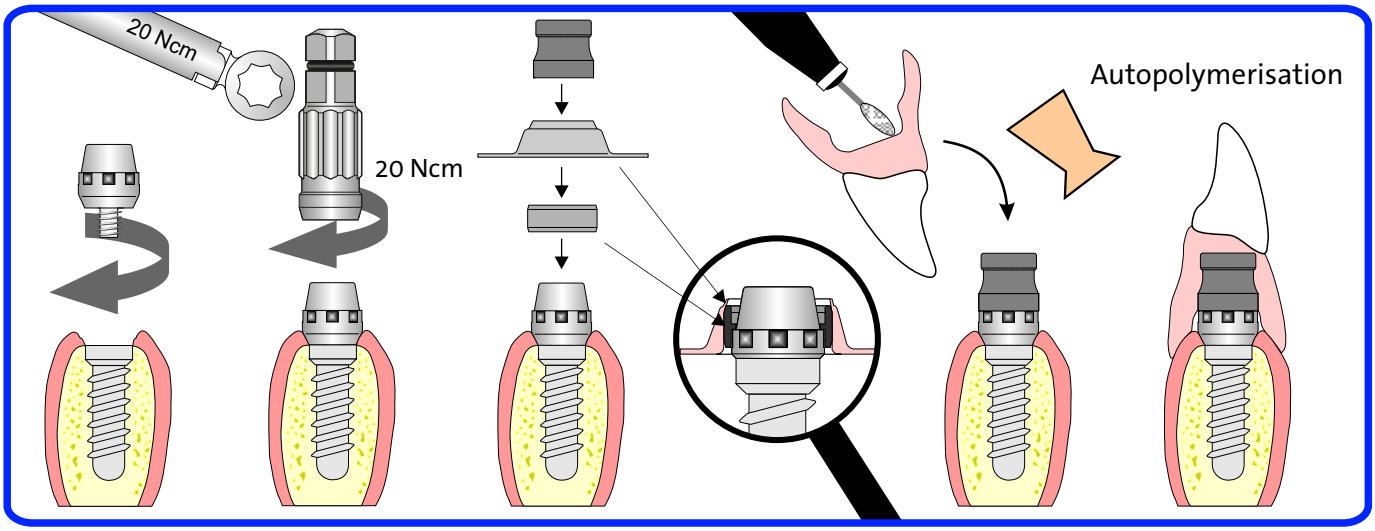
X-Line *



Titanmagnetics®insert + Positioning cuff P.00.01.X2 / P.00.01.X1 + Denture magnet U.00.01.X265

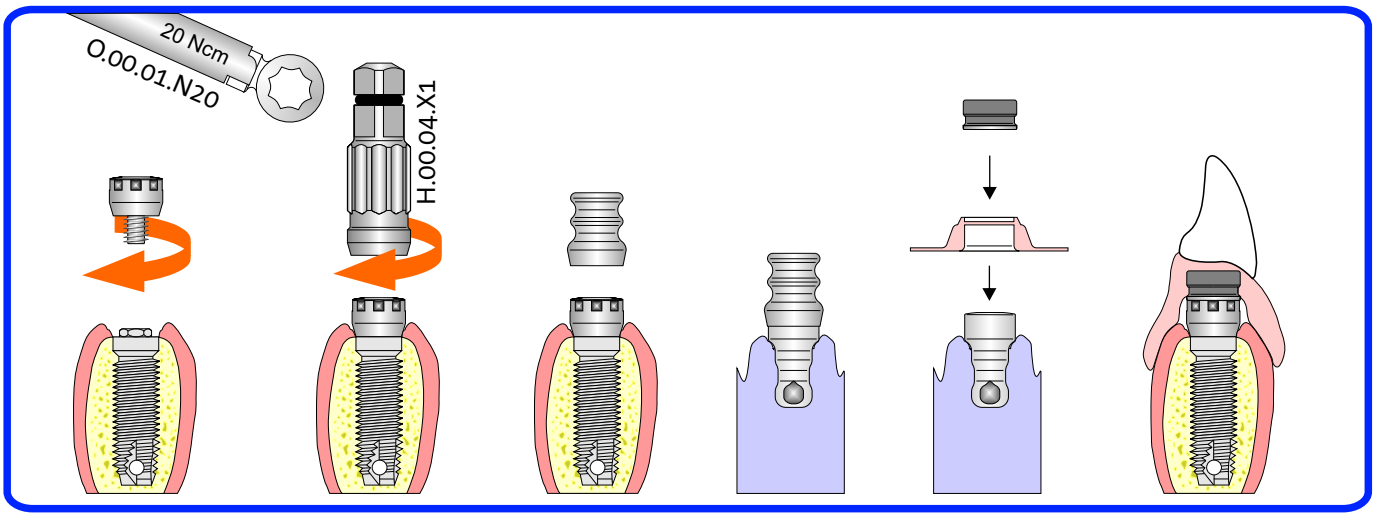
* The supply of Z-Line takes place according to the same principle!

K-Line

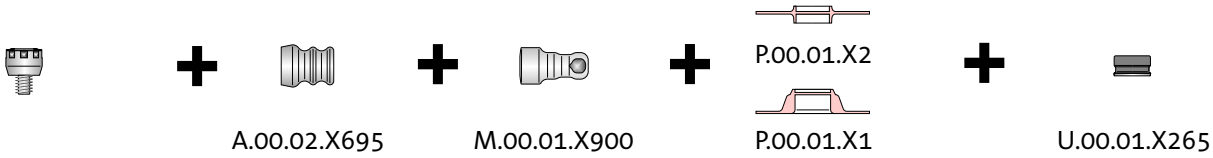


Titanmagnetics®insert + Resilience ring P.00.05.K1 + Positioning cuff P.00.01.K1 / P.00.01.K2 + Denture magnet U.00.01.K500

X-Line *



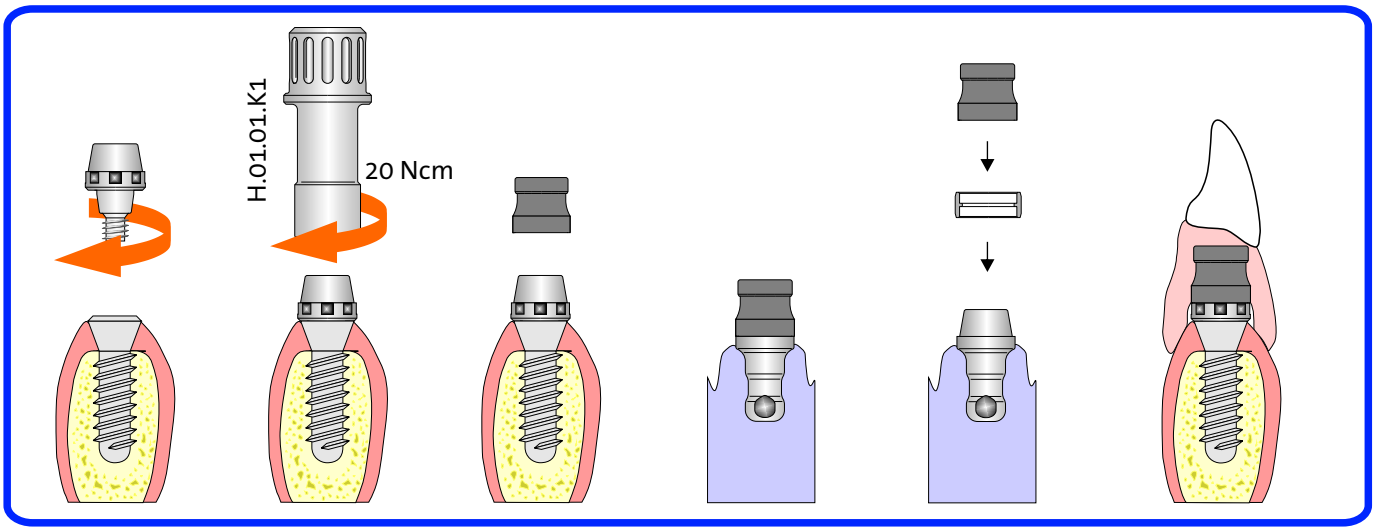
Titanmagnetics®insert | Impression post | Laboratory replica | Positioning cuff | Denture magnet



A.00.02.X695 | M.00.01.X900 | P.00.01.X1 | U.00.01.X265

* The supply of Z-Line takes place according to the same principle!

K-Line

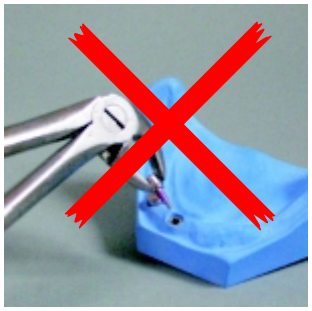


Titanmagnetics®insert | Denture magnet and impression post | Laboratory replica | Resilience ring

U.00.01.K500 | M.00.01.K750 | P.00.05.K1

New preparation (labside)

1. Screw in Titanmagnetics® intraorally with torque wrench (20 Ncm)



2. Never screw in or out with forceps!

3. Functional impression with Titanmagnetics® impression posts

4. Jaw relation template fixed by Titanmagnetics®

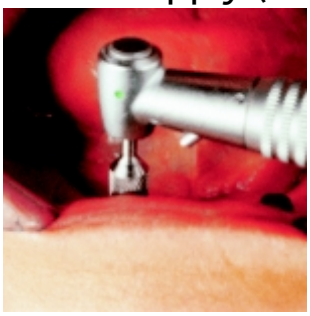
5. Wax-up on magnet retained template

6. Model cast modellation on casting model

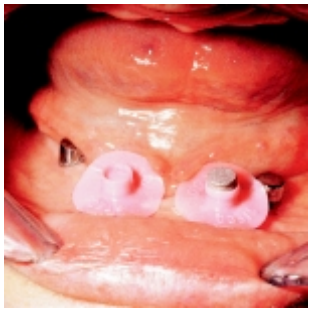
7. Magnets fixed in model casted framework

8. Finished denture

Direct supply (chairside)



1. Screw in Titanmagnetics® with torque wrench (20 Ncm)



2. Place position cuff over abutment and put on denture magnet

3. Fill cavities of denture with fast curing acrylic

Implant list

Implant system	Implant manufacturer	page
Ankylos/ Ankylos C/X	Friadent	14
Ankylos-EO (facial prosthetics)	Friadent	47
Bonelock	Stryker-Leibinger	14
Bone Trust	Medical Instinct	14
BPI	BPI	30
Brånemark (RP, WP, NP)	Nobel Biocare	15
Camlog	Camlog	16, 17
Compress	IGZ	17
Dyna	Dyna	17
Endopore	Sybron Implant Solutions	20
EO (facial prosthetics)	Straumann	47
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Impla	Schütz	21
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Omniloc	Calcitek	24
Osfix	Osfix	25
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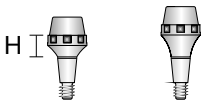
Independent of implant systems	Manufacturer	
Universal products		
- Prosthodontics	Steco	35-37
- Facial prosthetics	Steco	52-54

All product numbers marked with an asterisk *) refer to products exclusively distributed via implant manufacturers. The universal denture magnets, impression posts and laboratory replicas can also be ordered from the companies specified. The order numbers and the german telephone numbers of our sales partners you will find starting from page 55.

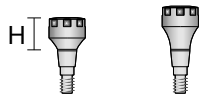
Ankylos, dental implant [FRIADENT]

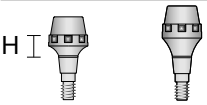
X-Line	Distance height	Product number
H 4.4 mm 5.9 mm	H 4.40 mm H 5.90 mm	I.03.02.X440 I.03.02.X590

Z-Line	Distance height	Product number
H 4.4 mm	H 4.40 mm	I.03.02.Z440

K-Line	Distance height	Product number
 H 2.95 mm 4.45 mm	H 2.95 mm H 4.45 mm	I.03.02.K295 I.03.02.K445

Ankylos C/X, dental implant [FRIADENT]

X-Line	Distance height	Product number
 H 4.4 mm 5.9 mm	H 4.40 mm H 5.90 mm	I.03.04.X440 I.03.04.X590

K-Line	Distance height	Product number
 H 2.95 mm 4.45 mm	H 2.95 mm H 4.45 mm	I.03.04.K295 I.03.04.K445

Bonelock, ø 4.50 [STRYKER-LEIBINGER]

X-Line	Distance height	Product number
H 4.2 mm	H 4.20 mm	I.28.01.X420

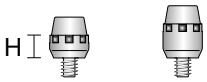
Bone Trust, ø 3.30 [MEDICAL INSTINCT]

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	164-3440 22*

Ankylos-EO for facial prosthetics can be found on page 47.

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

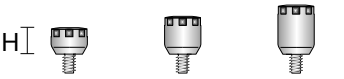
Brånemark, Regular **P**latform, (RP) **[NOBEL BIOCARE]**

X-Line	Distance height	Product number
H 3.5 mm 5.0 mm 6.5 mm	H 3.50 mm H 5.00 mm H 6.50 mm	I.02.01.X350 I.02.01.X500 I.02.01.X650
Z-Line	**Distance height**	**Product number**
H 4.75 mm 6.0 mm	H 4.75 mm H 6.00 mm	I.02.01.Z475 I.02.01.Z600
K-Line	**Distance height**	**Product number**
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.02.01.K300 I.02.01.K450

Brånemark, Wide **P**latform (WP) **[NOBEL BIOCARE]**

X-Line	Distance height	Product number
H 4.35 mm 5.4 mm 6.5 mm	H 4.35 mm H 5.40 mm H 6.50 mm	I.02.03.X435 I.02.03.X540 I.02.03.X650
Z-Line	**Distance height**	**Product number**
H 4.75 mm 6.0 mm	H 4.75 mm H 6.00 mm	I.02.03.Z475 I.02.03.Z600

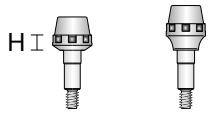
Brånemark, Narrow **P**latform (NP) **[NOBEL BIOCARE]**

X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm 6.5 mm	H 3.50 mm H 5.00 mm H 6.50 mm	I.02.04.X350 I.02.04.X500 I.02.04.X650

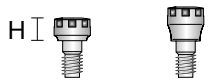
Vistafix (before times Brånemark) for facial prosthetics can be found on page 47.

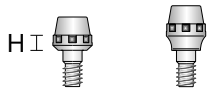
Camlog, ø 3.30 [CAMLOG]

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.33.01.X300 I.33.01.X450

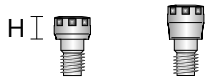
K-Line	Distance height	Product number
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.33.01.K200 I.33.01.K350

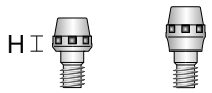
Camlog, ø 3.80 [CAMLOG]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.33.02.X300 I.33.02.X450

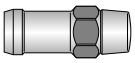
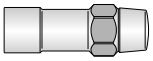
K-Line	Distance height	Product number
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.33.02.K200 I.33.02.K350

Camlog, ø 4.30 [CAMLOG]

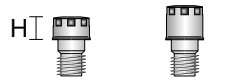
X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.33.03.X300 I.33.03.X450

K-Line	Distance height	Product number
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.33.03.K200 I.33.03.K350

Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	Camlog	X-Line	16.75 mm	H.00.04.X3
	Camlog	K-Line	19.10 mm	H.00.04.K3

Camlog, ø 5.00 [CAMLOG]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.33.04.X300 I.33.04.X450

K-Line	Distance height	Product number
H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.33.04.K200 I.33.04.K350

Camlog, ø 6.00 [CAMLOG]

Z-Line	Distance height	Product number
H 5.0 mm	H 5.00 mm	I.33.05.Z500

Compress, ø 3.90 [IGZ]

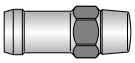
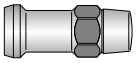
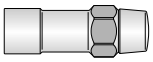
X-Line	Distance height	Product number
H 4.5 mm	H 4.50 mm	I.29.01.X450

Dyna, ø 3.00 [DYNA DENTAL ENGINEERING]

X-Line	Distance height	Product number
H 3.5 mm 5.0 mm	H 3.50 mm H 5.00 mm	I.18.01.X350 I.18.01.X500

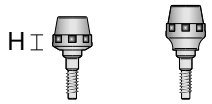
EO (Straumann), Epiplating (Medicon), Epitec (Stryker-Leibinger) for facial prosthetics find starting from page 48.

Torque wrench inserts

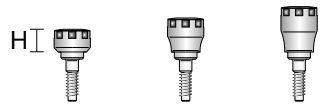
Fig.	Ratchet system	Product line	Length	Product number
	Camlog	X-Line	16.75 mm	H.00.04.X3
	Camlog	Z-Line	16.90 mm	H.00.04.Z3
	Camlog	K-Line	19.10 mm	H.00.04.K3

Frialit-2/XIVE, ø 3.40 [FRIADENT]

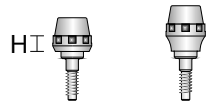
X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.06.05.X300 I.06.05.X450

K-Line	Distance height	Product number
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.06.05.K200 I.06.05.K350

Frialit-2/XIVE, ø 3.80 [FRIADENT]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm 6.0 mm	H 3.00 mm H 4.50 mm H 6.00 mm	I.06.01.X300 I.06.01.X450 I.06.01.X600

Z-Line	Distance height	Product number
H 3.5 mm	H 3.50 mm	I.06.01.Z350

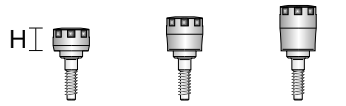
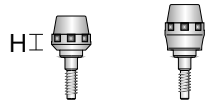
K-Line	Distance height	Product number
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.06.01.K200 I.06.01.K350

Torque wrench inserts

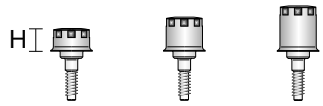
Fig.	Ratchet system	Product line	Length	Product number
	Friadent	X-Line	7.55 mm	H.06.01.X1
	Friadent	Z-Line	7.70 mm	H.06.01.Z1
	Friadent	K-Line	9.90 mm	H.06.01.K1
	For Frialit-2 screwdriver 45/5722*			

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

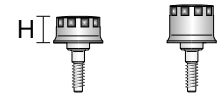
Frialit-2/XIVE, ø 4.50 [FRIADENT]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm 6.0 mm	H 3.00 mm H 4.50 mm H 6.00 mm	I.06.02.X300 I.06.02.X450 I.06.02.X600
Z-Line	**Distance height**	**Product number**
H 3.5 mm	H 3.50 mm	I.06.02.Z350
K-Line	**Distance height**	**Product number**
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.06.02.K200 I.06.02.K350

Frialit-2/XIVE, ø 5.50 [FRIADENT]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm 6.0 mm	H 3.00 mm H 4.50 mm H 6.00 mm	I.06.03.X300 I.06.03.X450 I.06.03.X600
Z-Line	**Distance height**	**Product number**
H 3.5 mm 5.0 mm	H 3.50 mm H 5.00 mm	I.06.03.Z350 I.06.03.Z500

Frialit-2/XIVE, ø 6.50 [FRIADENT]

Z-Line	Distance height	Product number
 H 3.5 mm 5.0 mm	H 3.50 mm H 5.00 mm	I.06.04.Z350 I.06.04.Z500

Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	Friadent	X-Line	7.55 mm	H.06.01.X1
	Friadent	Z-Line	7.70 mm	H.06.01.Z1
	Friadent	K-Line	9.90 mm	H.06.01.K1
	For Frialit-2 screwdriver 45/5722*			

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

Endopore, ø 4.10 [SYBRON IMPLANT SOLUTIONS]

X-Line	Distance height	Product number
H 2.75 mm	H 2.75 mm	I.51.01.X275

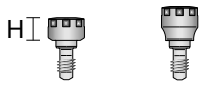
K-Line	Distance height	Product number
H 2.0 mm	H 2.00 mm	I.51.01.K200

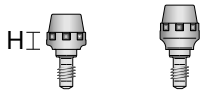
Endopore, ø 5.00 [SYBRON IMPLANT SOLUTIONS]

X-Line	Distance height	Product number
H 2.75 mm	H 2.75 mm	I.51.02.X275

K-Line	Distance height	Product number
H 2.0 mm	H 2.00 mm	I.51.01.K200

Impladent, ø 3.70 [LASAK]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.50.01.X300* I.50.01.X450*

K-Line	Distance height	Product number
 H 2.25 mm 3.5 mm	H 2.25 mm H 3.50 mm	I.50.01.K225* I.50.01.K350*

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

Impla, ø 4.20 [SCHÜTZ]

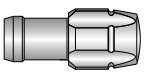
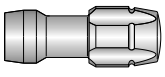
X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	635080* 635081*

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	635095*

Impla, ø 5.30 [SCHÜTZ]

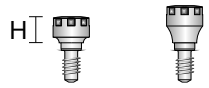
K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	635094*

Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	Impla	X-Line	18.50 mm	635082*
	Impla	K-Line	20.85 mm	635099*

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

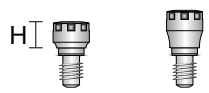
IMZ, ø 3.30 [FRIADENT]

X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm	H 3.50 mm H 5.00 mm	I.05.01.X350 I.05.01.X500

Z-Line	Distance height	Product number
H 4.0 mm	H 4.00 mm	I.05.01.Z400

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	I.05.01.K225

IMZ, ø 4.00 [FRIADENT]

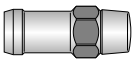
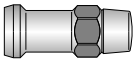
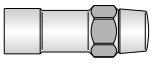
X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm	H 3.50 mm H 5.00 mm	I.05.02.X350 I.05.02.X500

Z-Line	Distance height	Product number
H 4.0 mm 6.5 mm	H 4.00 mm H 6.50 mm	I.05.02.Z400 I.05.02.Z650

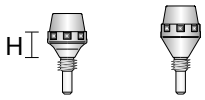
K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	I.05.02.K225

IMZ for facial prosthetics can be found on page 50.

Torque wrench inserts

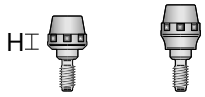
Fig.	Ratchet system	Product line	Length	Product number
	IMZ	X-Line	16.75 mm	H.00.04.X3
	IMZ	Z-Line	16.90 mm	H.00.04.Z3
	IMZ	K-Line	19.10 mm	H.00.04.K3

MicroPlant, ø 3.20 [KOMET]

K-Line	Distance height	Product number
 H 2.5 mm 3.5 mm	H 2.50 mm H 3.50 mm	9881L1* 9881L2*

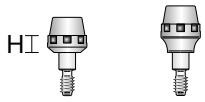
Neoss, platform fits for all implant diameters [NEOSS]

X-Line	Distance height	Product number
H 2.75 mm 4.25 mm	H 2.75 mm H 4.25 mm	I.48.01.X275 I.48.01.X425

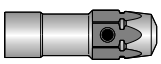
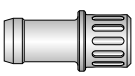
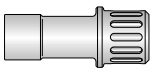
K-Line	Distance height	Product number
 H 2.00 mm 3.50 mm	H 2.00 mm H 3.50 mm	I.48.01.K200 I.48.01.K350

Nobel Replace *(formerly Replace Select)* **Interior connection, ø 3.50 [NOBEL BIOCARE]**

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.38.01.X300 I.38.01.X450

K-Line	Distance height	Product number
 H 2.25 mm 3.75 mm	H 2.25 mm H 3.75 mm	I.38.01.K225 I.38.01.K375

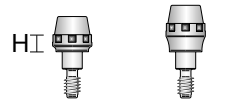
Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	MicroPlant	K-Line	20.10 mm	9884*
	Neoss	X-Line	16,75 mm	H.48.01.X1
	Neoss	K-Line	19,10 mm	H.48.01.K1

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

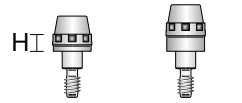
Nobel Replace *(formerly Replace Select)* **Interior connection, ø 4.30 [NOBEL BIOCARE]**

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.38.02.X300 I.38.02.X450

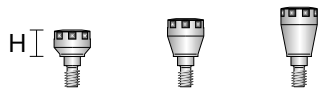
K-Line	Distance height	Product number
 H2.25 mm 3.75 mm	H 2.25 mm H 3.75 mm	I.38.02.K225 I.38.02.K375

Nobel Replace *(formerly Replace Select)* **Interior connection, ø 5.00 [NOBEL BIOCARE]**

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.38.03.X300 I.38.03.X450

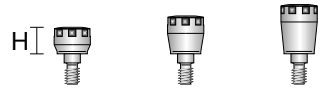
K-Line	Distance height	Product number
 H 2.25 mm 3.75 mm	H 2.25 mm H 3.75 mm	I.38.03.K225 I.38.03.K375

Omniloc, ø 3.25 [CALCITEK]

X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm 6.5 mm	H 3.50 mm H 5.00 mm H 6.50 mm	I.14.01.X350 I.14.01.X500 I.14.01.X650

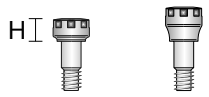
K-Line	Distance height	Product number
H 2.5 mm	H 2.50 mm	I.14.01.K250

Omniloc, ø 4.00 [CALCITEK]

X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm 6.5 mm	H 3.50 mm H 5.00 mm H 6.50 mm	I.14.02.X350 I.14.02.X500 I.14.02.X650

K-Line	Distance height	Product number
H2.5 mm	H 2.50 mm	I.14.02.K250

Osfix, ø 3.75 [OSFIX]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.19.01.X300 I.19.01.X450

K-Line	Distance height	Product number
H 2.0 mm	H 2.00 mm	I.19.01.K200

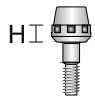
Pitt-Easy Bio-Oss, ø 3.25 [SYBRON IMPLANT SOLUTIONS formerly Oraltronics**]**

X-Line	Distance height	Product number
H 3.5 mm 5.0 mm 6.5 mm	H 3.50 mm H 5.00 mm H 6.50 mm	I.16.01.X350 I.16.01.X500 I.16.01.X650

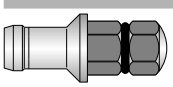
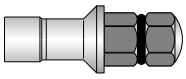
K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	I.16.01.K225

Pitt-Easy Bio-Oss, ø 3.75 [SYBRON IMPLANT SOLUTIONS formerly Oraltronics**]**

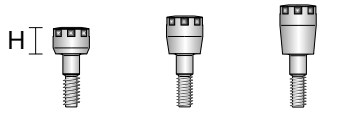
X-Line	Distance height	Product number
H 3.5 mm 5.0 mm 6.5 mm	H 3.50 mm H 5.00 mm H 6.50 mm	I.16.02.X350 I.16.02.X500 I.16.02.X650

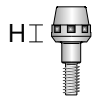
K-Line	Distance height	Product number
 H 2.25 mm	H 2.25 mm	I.16.02.K225

Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	Pitt-Easy	X-Line	21.50 mm	H.16.01.X1
	Pitt-Easy	K-Line	23.85 mm	H.16.01.K1

Pitt-Easy Bio-Oss, ø 4.00 [SYBRON IMPLANT SOLUTIONS formerly Oraltronics**]**

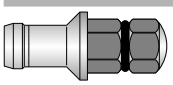
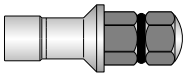
X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm 6.5 mm	H 3.50 mm H 5.00 mm H 6.50 mm	I.16.03.X350 I.16.03.X500 I.16.03.X650

K-Line	Distance height	Product number
 H 2.25 mm	H 2.25 mm	I.16.03.K225

Pitt-Easy Bio-Oss, ø 4.90 [SYBRON IMPLANT SOLUTIONS formerly Oraltronics**]**

Z-Line	Distance height	Product number
H 3 .25 mm	H 3.25 mm	I.16.04.Z325

Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	Pitt-Easy	X-Line	21.50 mm	H.16.01.X1
	Pitt-Easy	K-Line	23.85 mm	H.16.01.K1

Replace External hexagonal, ø 3.50 [NOBEL BIOCARE]

X-Line	Distance height	Product number
H 4.5 mm	H 4.50 mm	I.31.04.X450

Z-Line	Distance height	Product number
H 5.0 mm	H 5.00 mm	I.31.04.Z500

K-Line	Distance height	Product number
H 3.5 mm	H 3.50 mm	I.31.04.K350

Replace External hexagonal, ø 4.30 [NOBEL BIOCARE]

X-Line	Distance height	Product number
H 4.5 mm	H 4.50 mm	I.31.01.X450

K-Line	Distance height	Product number
H 3.5 mm	H 3.50 mm	I.31.01.K350

Replace External hexagonal, ø 5.00 [NOBEL BIOCARE]

X-Line	Distance height	Product number
H 4.5 mm	H 4.50 mm	I.31.02.X450

Replace External hexagonal, ø 6.00 [NOBEL BIOCARE]

Z-Line	Distance height	Product number
H 5.0 mm	H 5.00 mm	I.31.03.Z500

Screw-Vent, ø 3.50 [ZIMMER DENTAL]

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.13.01.X300 I.13.01.X450

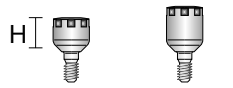
K-Line	Distance height	Product number
H 2.5 mm	H 2.50 mm	I.13.01.K250

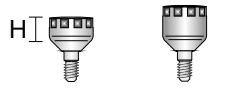
Screw-Vent, ø 4.50 [ZIMMER DENTAL]

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.13.02.X300 I.13.02.X450

K-Line	Distance height	Product number
H 2.5 mm	H 2.50 mm	I.13.02.K250

Semados, ø 3.25 - 4.50 [BEGO IMPLANT SYSTEMS]

X-Line	Distance height	Product number
 H 4.0 mm 5.5 mm	H 4.00 mm H 5.50 mm	55850* 55851*

Z-Line	Distance height	Product number
 H 4.0 mm 5.5 mm	H 3.00 mm H 5.00 mm	I.08.01.Z300 I.08.01.Z500

K-Line	Distance height	Product number
H 2.5 mm	H 2.50 mm	I.08.01.K250

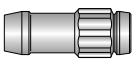
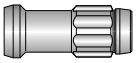
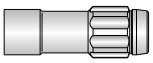
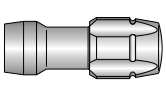
SIC, ø 4.20 [SIC INVENT]

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	935095*

SIC, ø 5.30 [SIC INVENT]

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	935094*

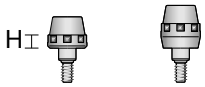
Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	Semados	X-Line	16.75 mm	55852*
	Semados	Z-Line	16.90 mm	H.08.01.Z1
	Semados	K-Line	19.10 mm	H.08.01.K1
	SIC	K-Line	20.85 mm	935099*

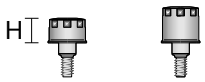
For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

SPI, ø 4.50 [THOMMEN MEDICAL]

X-Line	Distance height	Product number
H 3.25 mm	H 3.25 mm	I.04.03.X325

K-Line	Distance height	Product number
 H 1.75 mm 3.25 mm	H 1.75 mm H 3.25 mm	I.04.03.K175 I.04.03.K325

SPI, ø 5.00 [THOMMEN MEDICAL]

X-Line	Distance height	Product number
 H 3.25 mm 4.75 mm	H 3.25 mm H 4.75 mm	I.04.04.X325 I.04.04.X475

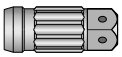
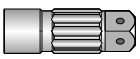
K-Line	Distance height	Product number
H 1.75 mm	H 1.75 mm	I.04.04.K175

BPI, ø 4.10 [BPI]

X-Line	Distance height	Product number
H 2.75 mm	H 2.75 mm	20060 *

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	21060 *

Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
Torque wrench inserts for Ankylos on request.				
	BPI	X-Line	15.00 mm	46700*
	BPI	K-Line	17.35 mm	46600*

Spline, ø 3.25 [ZIMMER DENTAL]

X-Line	Distance height	Product number
	H 3.75 mm	I.26.01.X375

H 3.75 mm

Spline, ø 3.75 [ZIMMER DENTAL]

X-Line	Distance height	Product number
	H 3.75 mm	I.26.02.X375

H 3.75 mm

Steri-Oss, ø 3.25 Hex [NOBEL BIOCARE]

X-Line	Distance height	Product number
	H 4.35 mm	I.23.01.X435

H 4.35 mm

Steri-Oss, ø 3.80 NonHex [NOBEL BIOCARE]

X-Line	Distance height	Product number
	H 3.25 mm	I.23.03.X325

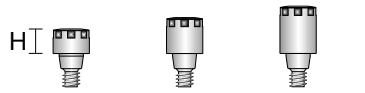
H 3.25 mm

Steri-Oss, ø 4.80 NonHex [NOBEL BIOCARE]

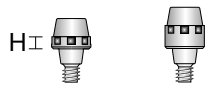
X-Line	Distance height	Product number
	H 3.25 mm	I.23.02.X325

H 3.25 mm

Straumann, Head diameter ø 4.80 [STRAUMANN]

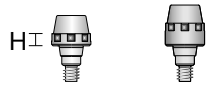
X-Line	Distance height	Product number
 H 3.25 mm 4.75 mm 6.25 mm	H 3.25 mm H 4.75 mm H 6.25 mm	048.511* I.01.02.X475 I.01.02.X625

Z-Line	Distance height	Product number
H 3.75 mm	H 3.75 mm	I.01.02.Z375

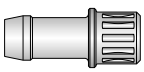
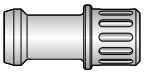
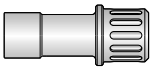
K-Line	Distance height	Product number
 H 1.5 mm 3.0 mm	H 1.50 mm H 3.00 mm	I.01.02.K150 I.01.02.K300

TG Osseotite, ø 4.80 [3i]

X-Line	Distance height	Product number
H 3.25 mm	H 3.25 mm	I.32.01.X325

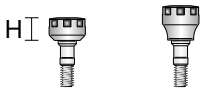
K-Line	Distance height	Product number
 H 1.5 mm 3.0 mm	H 1.50 mm H 3.00 mm	I.32.01.K150 I.32.01.K300

Torque wrench inserts

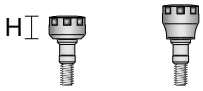
Fig.	Ratchet system	Product line	Length	Product number
	Straumann	X-Line	16.75 mm	046.146*
	Straumann	Z-Line	16.90 mm	H.01.01.Z1
	Straumann	K-Line	19.10 mm	H.01.01.K1

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

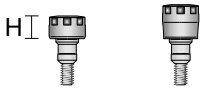
tioLogic, S-series [DENTAURUM IMPLANTS]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	386-170-00* 386-171-00*

tioLogic, M-series [DENTAURUM IMPLANTS]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	386-270-00* 386-271-00*

tioLogic, L-series [DENTAURUM IMPANTS]

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	386-370-00* 386-371-00*

Tiolox, ø 3.50 [DENTAURUM IMPLANTS]

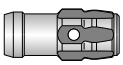
X-Line	Distance height	Product number
H 4.5 mm 6.5 mm	H 4.50 mm H 6.50 mm	I.17.01.X450 I.17.01.X650

K-Line	Distance height	Product number
H 3.5 mm	H 3.50 mm	I.17.01.K350

Tiolox, ø 4.50 [DENTAURUM IMPLANTS]

X-Line	Distance height	Product number
H 4.5 mm 6.0 mm	H 4.50 mm H 6.00 mm	I.17.02.X450 I.17.02.X600

Torque wrench inserts

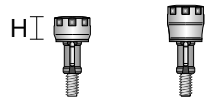
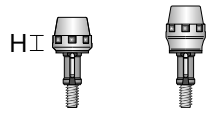
Fig.	Ratchet system	Product line	Length	Product number
	tioLogic	X-Line	15.20 mm	387-670-00*

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

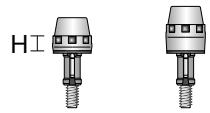
Prowital, ø 3.5 [PROWITAL DENTAL IMPLANTS formerly Wieland Dental Implants**]**

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.47.01.X300 I.47.01.X450

Prowital, ø 4.3 [PROWITAL DENTAL IMPLANTS formerly Wieland Dental Implants**]**

X-Line	Distance height	Product number
 H 3.0 mm 4.5 mm	H 3.00 mm H 4.50 mm	I.47.02.X300 I.47.02.X450
K-Line	**Distance height**	**Product number**
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.47.02.K200 I.47.02.K350

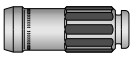
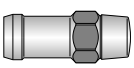
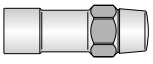
Prowital, ø 5.0 [PROWITAL DENTAL IMPLANTS formerly Wieland Dental Implants**]**

K-Line	Distance height	Product number
 H 2.0 mm 3.5 mm	H 2.00 mm H 3.50 mm	I.47.03.K200 I.47.03.K350

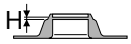
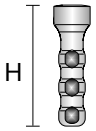
ZL-Duraplant, ø 2.90 [ZL-MICRODENT]

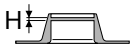
X-Line	Distance height	Product number
H 3.75 mm 5.25 mm	H 3.75 mm H 5.25 mm	10910* 10911*

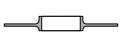
Torque wrench inserts

Fig.	Ratchet system	Product line	Length	Product number
	ZL-Duraplant	X-Line	16.50 mm	10917*
	Wi.tal	X-Line	16.90 mm	H.00.04.X3
	Wi.tal	K-Line	19.10 mm	H.00.04.K3

For the correctness of the product numbers of the foreign manufactured products we don't take over guarantee.

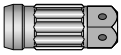
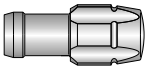
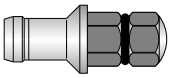
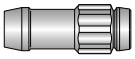
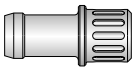
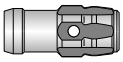
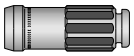
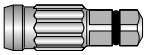
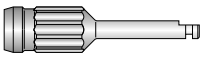
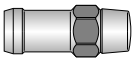
X-Line	Description	Height	Product number
	Denture magnet for acrylic	H 2.65 mm	U.00.01.X265
	Denture magnet for acrylic (about 1,4 N withdrawal force)	H 1.80 mm	U.00.04.X180
	Positioning cuff supragingival	H 0.30 mm	P.00.01.X1
	Positioning cuff subgingival	H 0.30 mm	P.00.01.X2
	Impression post	H 6.95 mm	A.00.02.X695
	Laboratory replica	H 9.00 mm	M.00.01.X900
	Laboratory replica (longshaft, to application with gum masks)	H 16.00 mm	M.00.01.X1600

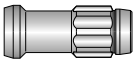
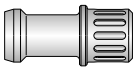
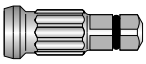
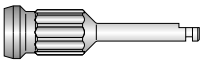
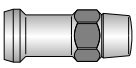
Z-Line	Description	Height	Product number
	Denture magnet for acrylic	H 3.15 mm	U.00.01.Z315
	Positioning cuff supragingival	H 0.50 mm	P.00.03.Z1
	Impression post	H 6.95 mm	A.00.02.Z695
	Laboratory replica	H 10.00 mm	M.00.01.Z1000

K-Line	Description	Height	Product number
	Denture magnet for acrylic	H 5.00 mm	U.00.01.K500
	Positioning cuff supragingival		P.00.01.K1
	Positioning cuff subgingival		P.00.01.K2
	Resilience ring	H 0.30 mm	P.00.05.K1
	Laboratory replica	H 7.50 mm	M.00.01.K750
	For the impression please use the denture magnet!		

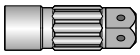
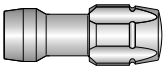
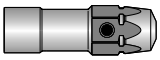
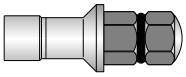
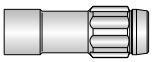
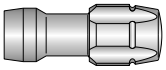
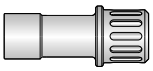
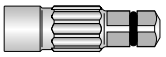
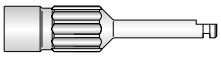
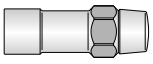
These products are available partially also with the implant manufacturers, those exclusively Titanmagnetics®inserts for their systems drive out. The product numbers find starting from page 55.

Torque wrench inserts

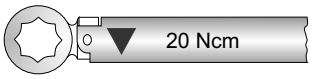
X-Line	Ratchet system	Length	Product number
	BPI [BPI]	15.00 mm	46700*
	Frialit-2/XIVE [Friadent] For Frialit-2 screwdriver 45/5722*	7.55 mm	H.06.01.X1
	Impla [Schütz]	18.50 mm	635087*
	Pitt-Easy [Sybron Implant Solutions]	21.50 mm	H.16.01.X1
	Semados [Bego Implant Systems]	16.75 mm	55852*
	Straumann [Straumann]	16.75 mm	046.146*
	tioLogic [Dentaurum Implants]	15.20 mm	387-670-00*
	ZL-Duraplant [ZL-Mikrodent]	16.50 mm	10917*
	Square connection (US-Pat.) Fits for the following ratchet: Dynatorq, Dentsply (old), Paragon, Screw-Vent, Steri-Oss	18.25 mm	H.00.04.X1
	ISO 204 (contra angle)	25.80 mm	H.00.04.X2
	Hexagonal connection Fits for the following ratchet: Bredent, Camlog, IMZ, prowital	16.75 mm	H.00.04.X3

Z-Line	Ratchet system	Length	Product number
	Frialit-2/XIVE [Friadent] For Frialit-2 screwdriver 45/5722*	7.70 mm	H.06.01.Z1
	Semados [Bego Implant Systems]	16.90 mm	H.08.01.Z1
	Straumann [Straumann]	16.90 mm	H.01.01.Z1
	Square connection (US-Pat.) Fits for the following ratchet: Dynatorq, Dentsply (old), Paragon, Screw-Vent	18.40 mm	H.00.04.Z1
	ISO 204 (contra angle)	25.90 mm	H.00.04.Z2
	Hexagonal connection Fits for the following ratchet: Bredent, Camlog, IMZ	16.90 mm	H.00.04.Z3

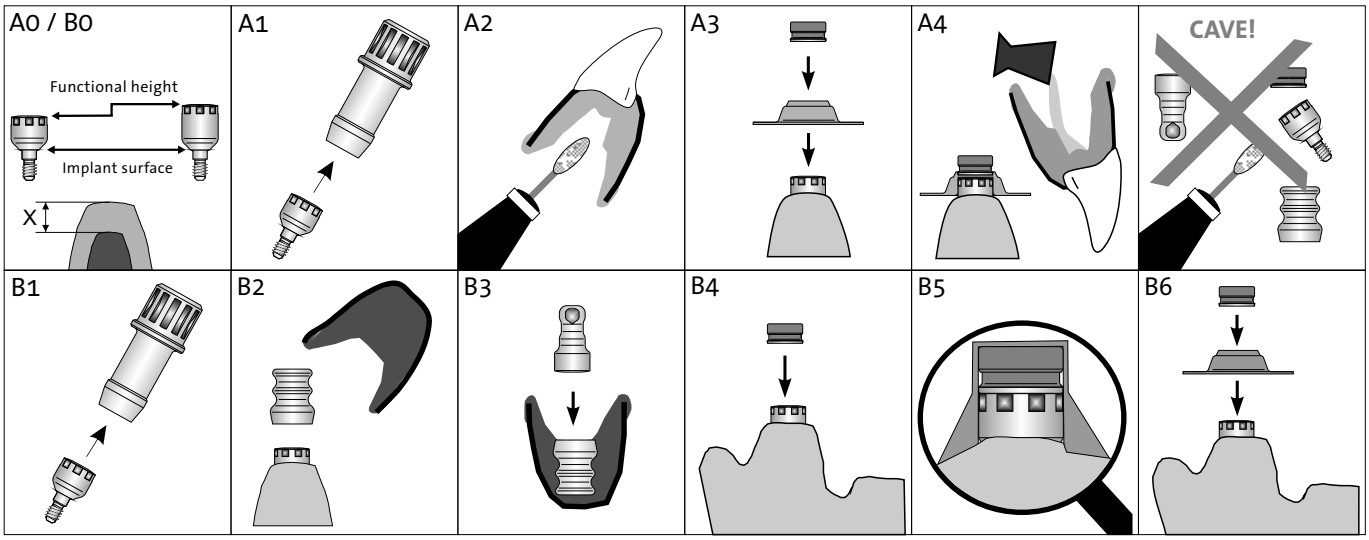
For the correctness of the product numbers of the foreign manufactured products we do not take over guarantee.

K-Line	Ratchet system	Length	Product number
	BPI [BPI]	17.35 mm	46600*
	Frialit-2/XIVE [Friadent] For Frialit-2 screwdriver 45/5722*	9.90 mm	H.06.01.K1
	Impla [Schütz]	20.85 mm	635099*
	MicroPlant [Komet]	20.10 mm	9884*
	Pitt-Easy [Sybron Implant Solutions]	23.85 mm	H.16.01.K1
	Semados [Bego Implant Systems]	19.10 mm	H.08.01.K1
	SIC invent [Sic invent]	20.85 mm	935099*
	Straumann [Straumann]	19.10 mm	H.01.01.K1
	Square connection (US-pat.) Fits for the following ratchet: Dynatorq, Dentsply (old), Paragon, Screw-Vent	20.60 mm	H.00.04.K1
	ISO 204 (Winkelstück)	28.10 mm	H.00.04.K2
	Hexagonal connection Fits for the following ratchet: Bredent, Camlog, IMZ, prowital	19.10 mm	H.00.04.K3

Torque wrench (with square connection for torque wrench inserts H.00.04....1)

Fig.	Description	Product number
	Dynatorq, torque 20 Ncm	O.00.01.N20

For the correctness of the product numbers of the foreign manufactured products we do not take over guarantee.



A. Instructions for incorporating Titanmagnetics® into an existing denture (chairside)

A0/B0. Selection of the abutment height

Titanmagnetics® are offered with integrated spacers in different abutment heights. For the correct selection the gingiva thickness must be measured before insertion. Subgingival inserted Titanmagnetics® project at least 1 mm from the gingiva.

A1. Application

After removal of the cover screw, the Titanmagnetics® insert is screwed into position with its convex (conical) functional area inserted into the torque wrench insert. The external octagon of the insert and the internal octagon of the torque wrench insert must fit perfectly together. A magnet in the torque wrench insert ensures a looked connection. The insert can now be carefully screwed into the implant. The last revolution is completed with a torque wrench (maximum tightening torque of 20 Ncm). The insert must be retightened with the torque wrench insert 10 to 14 days later to prevent the insert from loosening (danger of breakage). Do not screw in by hand or with forceps.

Healing cap

The Titanmagnetics® insert can be used as a healing cap. A collar of scar tissue forms around the final prosthodontics abutment and will remain in place (Prof. Donath). The gingiva should be left to heal for 10 to 14 days between application of the inserts and taking the impression.

A2. Fitting

The existing denture is carefully ground from the basal direction at the positions above the magnets. A hollow must be created to allow the Titanmagnetics®insert and the denture magnet to fit correctly under the denture.

A3. Use of positioning cuff

The positioning cuff protects the margin of the gingiva and the functional surfaces during polymerisation of the Titanmagnetics® denture magnets, and also ensures a resilience of 0.3 mm. If the magnet head projects more than 2 mm above the gingiva (for example with transgingival implants), use positioning cuff no. 1. Use positioning cuff no. 2 for subgingival implant inserts (1-2 mm above the gingiva).
The positioning cuff is fixed over the head of the Titanmagnetics® insert in the mouth. The denture magnet is then set into the flat cavity. The reverse funnel shaped positioning cuff No. 1 forms a matching opening in the denture base. This guarantees tension-free seating. The positioning cuff is made of silicone and can easily be removed after the polymerisation of the denture magnet.
A resilience ring is also used as a spacer (0.3 mm) between the inserts and the denture magnet for the K-Line.

A4. Finishing

The denture magnets are polymerised into the previously created cavities with cold-curing polymer. The plastic is inserted basally, then the denture is placed in the mouth. The patient must bite hard until the polymer has hardened (min. 15 min) if the denture is removed before complete polymerisation, the denture magnets may not be in their correct position, resulting in occlusion problems and premature wear of the Titanmagnetics®. Excess polymer can be carfully removed. Do not damage the titanium housing.

B. Instructions for incorporating Titanmagnetics® into a new denture (labside)

B0. See A0. B1. See A1

B2. Impression

The Titanmagnetics® impression post is placed on the insert. A magnet in the impression post locks it to the insert. Check that the fit is correct with a finger. The impression is made with a closed individual impression tray which must be blocked out about 1 cm above the implant position. Direct application of the impression compound to the impression post has proven to be advantageous. When using the K-Line, the Titanmagnetics® denture magnet (U.00.01.K500) is used as the impression post.

B3. Model fabrication

The Titanmagnetics® laboratory replica is inserted into the impression post. The integrated magnets cause a strong connection. The model should be made of a stable super dental plaster and dental plastic (around the implant positions).

B4. Bite impression and setup

The Titanmagnetics® denture magnet is placed into the bite impression and into the following setup. This improves safety during the following processes. The laboratory should use its own denture magnets for this procedure.

B5. Model cast basis / plaster precast

A model cast base and reinforcement must be used to avoid the risk of breakage. The master cast is duplicated with the denture magnets in place. The top of the magnetic head of the insert projecting from the gingiva must be blocked out in a funnel-shape. Optimum functional and aesthetic results are achieved using a prefabricated plaster precast.

B6. Finishing

The positioning cuff protects the functional surfaces during the cementing of the denture magnets and creation of a resilience of 0.3 mm. It is pulled over the head of the Titanmagnetics® insert on the model and can be removed without difficulty when the denture magnet has set. The denture magnets are cemented or polymerised into the cavities with composite cement or with autopolymerising resin.

CAVE:

The 0.2 mm thick titanium housings must never be ground. Grinding could release the intra-orally unstable magnetic alloy (Sm_2Co_{17}). The resulting corrosion would reduce the magnetic field strength and lead to further destruction of the titanium housing. Titanmagnetics® must not be soldered or laser-welded. The heat created by soldering would irreversibly destroy the magnetic field strength and laser-welding perforate the titanium housing.

CAVE:

REF

LOT

Caution is required when using magnets. Keep magnets away from magnetic data storage media and electronic devices is especially recommended. Titanmagnetics® do not affect cardiac pacemakers when they are used as directed (no direct contact).
Magnetic abutments and denture magnets must be removed before performing MRI diagnoses (Magnetic Resonance Imaging). Otherwise the magnets can be damaged. This information must be given to the patient.
Loosened Titanmagnetics® inserts can damage the inner implant thread. Patients should therefore immediately see a dentist in order to have the Titanmagnetics® inserts retightened. The denture should be funnel-shaped at its base around the top of the magnet. The titanium sleeves, only 0.2 mm thick, must not be ground. Titanmagnetics® must not be soldered nor laser-welded. The heat created by welding will irreversibly destroy the magnetic field strength and laser could perforate the titanium housing.
If the titanium sleeve is damaged (perforation), the damaged parts must be replaced immediately, otherwise the intra-orally unstable magnetic alloy (Sm_2Co_{17}) could be released. This would lead to corrosion and loss of the magnet field strength and further destruction of the titanium sleeve. For risk management damaged parts should be sent to the manufacturer or to the distributor with their product- and batch numbers, the insertion date and the implant site.
Please record the product- and batch numbers of the Titanmagnetics® inserts and denture magnets in the patient's file or in the warranty booklet.

1. Description of the Titanmagnetics® system parts [with the product classification of the Steco® product number system]
The different Steco® products are classified by the initial letter of the product number:

A = Impression items	I = Inserts	P = Positioning cuffs
D = Diagnostic systems and -tools	M = Laboratory replica	U = Universal Titanmagnetics®
H = Auxiliary tools	O = OEM items	V = Connection elements

Four Titanmagnetics® product lines with different design, head diameter and withdrawal force are available for dental and craniofacial use.
X-Line: spherical, ø 4.8 mm, 1.6 N withdrawal force/ ***Z-Line***: spherical, ø 5.8 mm, 3.0 N withdrawal force
K-Line: conical, ø 5.2 mm, 1.6 N withdrawal force / ***T-Line***: telescope, ø 5.8 mm, 1.4 N withdrawal force (facial prosthetics). Titanmagnetics® are part of a general design and must be used with original Steco® parts and instruments only, according to the instructions and recommendations of the steco-system-technik. Otherwise, no liability can be accepted. The individual parts are designed to work with the different implant systems. For root post caps only spherical Titanmagnetics® of the ***X-*** and ***Z-Line*** are available.

2. Magnetic fields
There are no references in the current literature indicating that permanent magnetic fields with flux density in the range to about 300 mT (millitesla) can be locally harmful for humans. Titanmagnetics® create, like the earth itself, a permanent magnetic field which cannot be compared to an electromagnetic field (such as that of a mobile telephone or a high-voltage transmission line). The average magnetic field strength amounts to about 186 mT (X-, K- and T-Line) or 300 mT (Z-Line).

3. Materials
Titanmagnetics® insert and root post caps
Titanmagnetics® denture magnet
Titanmagnetics® torque wrench insert
Titanmagnetics® impression post
Titanmagnetics® laboratory replica
Titanmagnetics® positioning cuff
} Housing: pure titanium according to DIN 17850 (Ti4) / ASTM F 67 (Grade 4)
Magnetic core: Sm_2Co_{17}, laser-welded gas-tight in titanium

Dental silicone

Instruction for disinfection and sterilisation

Sterilization can be done in the autoclave with moist, hot air (e.g. gravitation principle or fractionated pre-vakuum at 132/134°C at 3 bar, 5 minutes). Please refer also to the manufacturer's user manual and use validated processes only.

Instruction for cleaning
Increased plaque deposits on the highly polished Titanmagnetics® could not be detected (Tiller 1993, 1995). However, if plaque deposits are detected on Titanmagnetics®, they must be removed immediately. Never scratch the surface of the Titanmagnetics® with metal instruments. Deposits on the functional surfaces will increased the distance between the components, leading to an apparent loss of adhesion.

Instruction for use

Titanmagnetics® inserts and denture magnets are for single use in one patient. Re-use is not permitted. Patients should return to the practice at three-months recall intervals for a check of the magnets for wear of the titanium sleeves and to check the inserts are not loose. Correct seating of the denture should also be checked. Relining may also be required.

4. Indication
1. Gero-prosthodontics: anchoring of hybrid and partial dentures in class III (toothless jaw) and class II (very few teeth left) (classification according to the consensus paper 12/2008). For the treatment of class III-cases with removable dentures in the upper jaw 6 implants and in lower jaw 4 implants are recommend. In individual cases a treatment with a deviating number of implants, as aforesaid, may be indicated. These cases depend on the anatomical and prosthetic conditions of the patient. Because of the minimal loading forces on the implants, magnetically anchored dentures can be planned on short (6 mm) implants (applicable for ***X- and Z-Line only)***.
2. Facial prosthetics: anchoring of facial prostheses and resection prostheses.

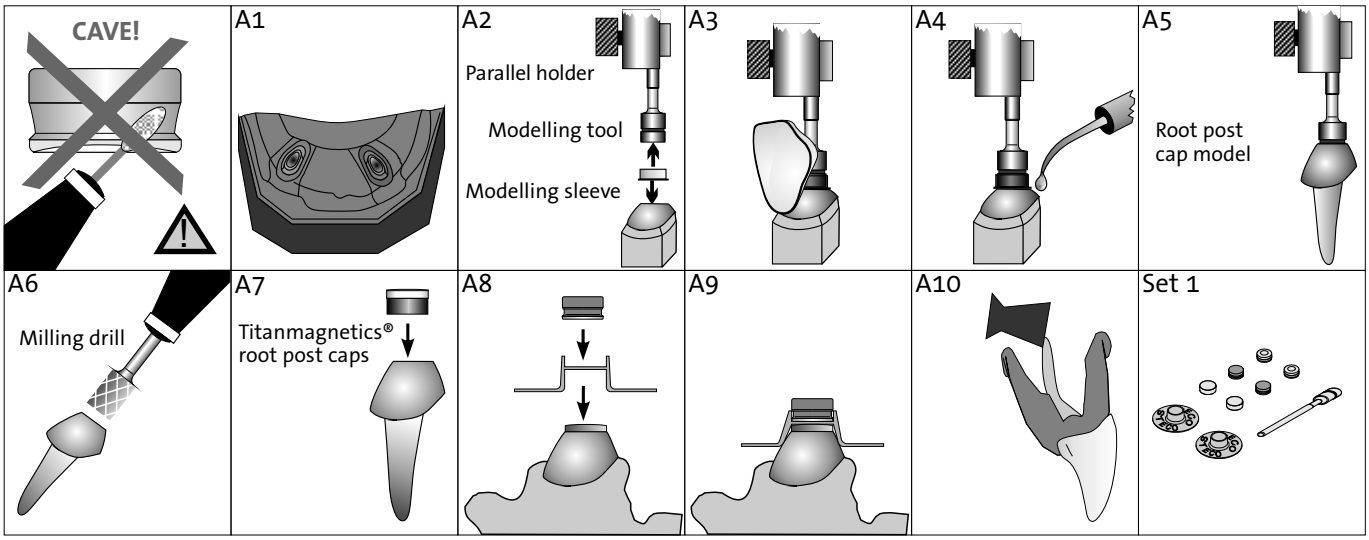
5. Dimensions [1] Height/Length [2] Diameter

Product [product number system]	***X-Line***		***Z-Line***		***K-Line***		***T-Line***	
Titanmagnetics® insert [I] for implants	[1] System dependent	[2] 4.80 mm	[1] System dependent	[2] 5.80 mm	[1] System dependent	[2] 5.20 mm	[1] System dependent	[2] 5.80 mm
Titanmagnetics® denture magnet [U]	[1] 2.65 mm	[2] 4.80 mm	[1] 3.15 mm	[2] 5.80 mm	[1] 5.00 mm	[2] 5.20 mm	[1] 5.70 mm	[2] 5.80 mm
Titanmagnetics® positioning cuff [P]	[1] 0.30 mm	[2] 15.00 mm	[1] 0.50 mm	[2] 15.00 mm	----------	[2] 15.00 mm	[1] 0.30 mm	[2] 15.00 mm
Titanmagnetics® resilience ring [P]	----------	----------	----------	----------	[1] 0.30 mm	[2] 6.00 mm	----------	----------
Titanmagnetics® torque wrench inserts [H]	diverse	[2] 4.80 mm	diverse	[2] 5.80 mm	diverse	[2] 5.20 mm	diverse	[2] 5.80 mm
Titanmagnetics® impression post [A]	[1] 6.95 mm	[2] 4.80 mm	[1] 6.95 mm	[2] 5.80 mm	Use the denture magnet!		[1] 7.50 mm	[2] 5.80 mm
Titanmagnetics® laboratory replica [M]	[1] 9.00 mm	[2] 4.80 mm	[1] 10.00 mm	[2] 5.80 mm	[1] 7.50 mm	[2] 5.20 mm	[1] 10.50 mm	[2] 5.80 mm
Titanmagnetics® root post caps [V]	[1] 2.50 mm	[2] 4.80 mm	[1] 3.00 mm	[2] 5.80 mm	No root post cap available!		No root post cap available!	

6. Advantages of magnetic anchorage
+ Easy and stress-free delivery and removal of denture (Gbara 1995), cost-effective (Göhring 1997)
+ Good implant and gingiva-supported seating of dentures (Wirz 1994)
+ Avoidance of unphysiological loading forces on the implant (Jäger and Wirz 1993, 1994, Vesper 1995)
+ Easy oral hygiene for implants and dentures (Tiller 1993, 1995)
+ Reduced time and expense for dentist and dental technician (Stemmann 1995, 1997)

7. Literature The manufacturer can provide an extensive literature list or see **www.steco.de**.

Instruction for use Titanmagnetics® root post caps



Preparing Titanmagnetics® root post caps

CAVE: Never grind Titanmagnetics®. The walls are only 0.2 mm thick!

A1: Preparation of the saw stump model followed by modelling of a flat root post cap as usual.

A2: Insert the root post cap modelling tool with attached modelling sleeve (for casting) into the parallel support [Choose from a narrow shank (ISO103) and wide shank (ISO123)].

A3: Setting up of teeth under aesthetic and functional aspects. Fixation of final set-up by pre-casting. Grinding preparation of tooth for the magnets. Determination of sleeve position on root post cap with the root post cap modelling tool (place in a low position over the stump, see total abutment height).

A4: Waxing of modelling sleeve on the root post cap. Coat sleeve with thin wax layer all around (conical form).

A5: Invest finished model, cast and trim as usual.

A6: Clean the receptacle for the Titanmagnetics® only slightly with cylindrical milling drill, so that it fits and the adhesive joint is not enlarged unnecessarily. Grit-blast with aluminium oxide (110/125).

A7: The convex Titanmagnetics® root post cap is cemented into the root post cap with a (two-component) dental adhesive. Both parts must be clean and grease-free! The magnet is cemented with the highly polished side (functional surface) upwards. The (polished) edge of the magnet is not enclosed by the cast object.

A8: *Only on assembly in an existing prosthesis!*
After the dentist has inserted and cemented the root post cap in the oral cavity, the positioning cuff is pulled over the root cap.

A9: The denture magnet is placed with the polished concave functional side on the positioning cuff. It is self-centring.

A10: The denture is recessed from the basal side in the region of the magnet. Cold curing polymer is placed into the recesses and on the denture magnet and the denture is inserted. Wait until the autopolymer is firmly bonded (not less than 15 minutes). Remove excess with wood or plastic spatula (non magnetic). Never grind the Titanmagnetics®.

Components needed for preparation:

Modelling tool [Product number M.00.04.X103 (shank ISO 103) or M.00.04.X123 (shank ISO 123)]

Titanmagnetics®root post cap [V.00.01.X250]

Modelling sleeve [M.00.03.X205]

Component A
Component B
Dental two-component adhesive [third-party manufacturer]

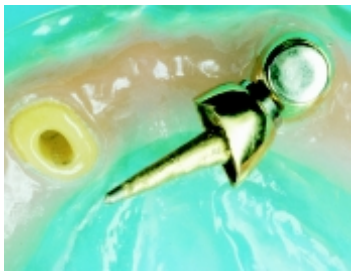
Titanmagnetics® denture magnet [U.00.01.X265]

Titanmagnetics® positioning cuff [P.00.04.X1]

ø 4.0
Milling drill [third-party manufacturer]

Note:
The overall height of the two Titanmagnetics® is 5.15 mm. The titanium housings must never be ground because this would eliminate the corrosion protection of the magnets.

Titanmagnetics® root post caps



Magnets have proved their worth in hybrid prosthetics for many years, whether on implants or on root caps. Minimagnets welded in gas-tight housing titanium guarantee long wearing time for high patient comfort. Simple insertion and removal and optimum cleaning options facilitate handling by the patient.

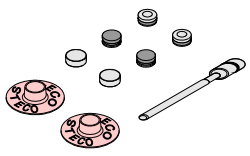
The pull-off force per magnet pair is about 160 grams. An advance in geroprosthetics.

Now, introduction into hybrid prostheses with magnet anchors is as easy as never before. All necessary parts for the standard case are combined in one set. Easy handling and price advantage!

Root post caps with accessories

X-Line	Description	Height	Product number
H	Titanmagnetics®root post cap	H 2.50 mm	V.00.01.X250
	Titanmagnetics®obturator	H 2.50 mm	V.00.02.X250
	Titanmagnetics® denture magnet for acrylic	H 2.65 mm	U.00.01.X265
	Titanmagnetics® denture magnet for silicone	H 2.65 mm	U.00.02.X265
H	Titanmagnetics® positioning cuff for root cap	H 0.30 mm	P.00.04.X1
	Modelling sleeves (2 pieces)	H 2.05 mm	M.00.03.X205
	Modelling tool (shank ISO 103, ø 2.35 mm)	H 32.55 mm	M.00.04.X103
	Modelling tool (shank ISO 123, ø 3.00 mm)	H 32.55 mm	M.00.04.X123

Root post cap set

X-Line	Description	Product number
	**Root post cap set 1** with modelling tool Contents: - 2 Titanmagnetics®root post cap - 2 Titanmagnetics® denture magnets - 2 Titanmagnetics® positioning cuffs - 2 Modelling sleeves - 1 Modelling tool (shank ISO 103, ø 2.35 mm)	S.00.02.X1
	Root post cap set 2 without modelling tool	S.00.02.X2

Root post caps with accessories

Z-Line	Description	Height	Product number
H	Titanmagnetics® root post cap	H 3.00 mm	V.00.01.Z300
	Titanmagnetics® denture magnet for acrylic	H 3.15 mm	U.00.01.Z315
	Titanmagnetics® denture magnet for silicone	H 3.15 mm	U.00.02.Z315

Display models

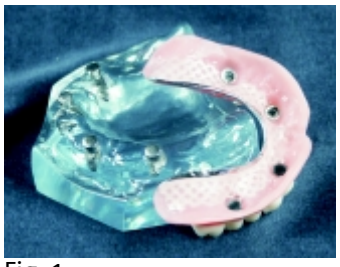


Fig. 1

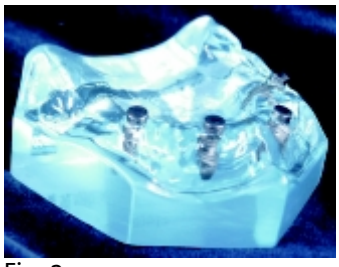


Fig. 2

Fig. 3

Fig. 4

The Titanmagnetics® acrylic models are an attractive aid. The transparent models provide a clear, unrestricted view of the implants. The jaws depict original case scenarios with considerable atrophy in both the upper and lower jaws. Clear identification is thus guaranteed for this target group.

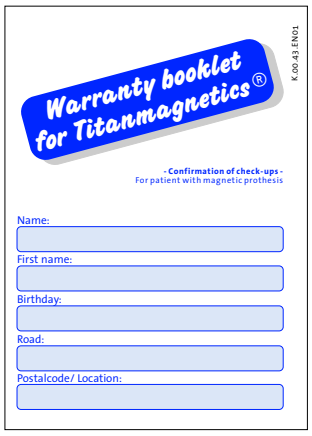
The models are available with and without dentures. Both dentures are based on generally recommended model casting; palate-free in the upper jaw and as an invisible strengthening support in the lower jaw. The denture-free models are supplied complete with the required denture Titanmagnetics® and can be supplemented inn individual laboratories to suit individual requirements.

Fig.	Description	Product number
Fig. 1	Acrylic model upper jawbone 4x ***X-Line*** with prosthesis	K.00.35.X4P
Fig. 2	Acrylic model upper jawbone 4x ***X-Line*** without prosthesis	K.00.35.X4M
Fig. 3	Acrylic model lower jawbone 2x ***X-*** and 2x ***X-Line*** with prosthesis	K.00.35.XK4P
Fig. 4	Acrylic model lower jawbone 2x ***X-*** and 2x ***X-Line*** without prosthesis	K.00.35.XK4M

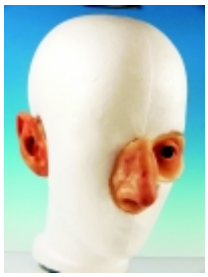
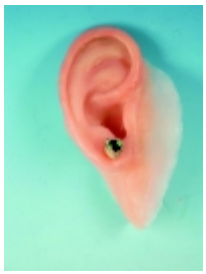
Further possibilities to clear up your patients comprehensively over the Titanmagnetics®

Request free of charge 25 patient brochures for your waiting room. In this booklet your patient can find an answer to all questions related Titanmagnetics®.
Order number: K.00.40.GB1

With every order, you will receive a warranty booklet for your patient. The booklet will help the patient to get an optimal documentation of his Titanmagnetics® supply. For older case of patients you can order the booklet free of charge. Order number: K.00.43.EN01



Titanmagnetics® for facial prosthetics

Epitheses are prostheses to cover facial defects which cannot be restored by surgical interventions. Therefore they are an essential requirement for the (re)integration of patients into the society. Beside aesthetical aspects, such as color or shape, the retention of the facial prosthesis is a decisive factor.

The affected person independently should be able to take off the facial prosthesis to clean or ventilate the defect area. A precise fitting resettlement is necessary for the general aesthetic expression of the patient.

After successful market launch of Titanmagnetics® for applications on root post caps and dental implants they are increasingly used for the retention of facial prostheses since 1991. The exclusively for facial prosthetics use constructed T-Line supplements the dental product lines.

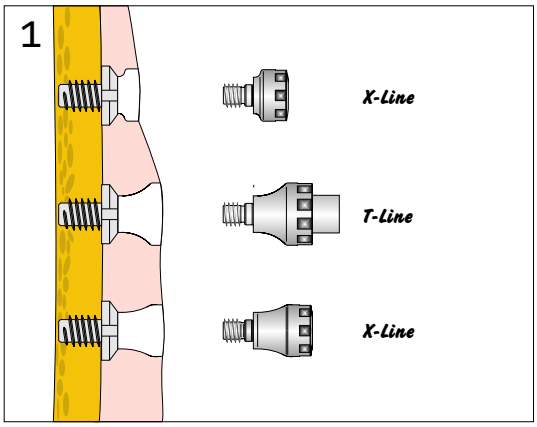
The Titanmagnetics® can be used as couplings for hollow opturators or multiparted defect facial prostheses with difficult shape, as well. The various indications can be trained in special courses at the international organization IASPE or in our Steco training workshops.

Advantages of magnet retention are:

- ☑ Availiable for many implant types and kinds of defects
- ☑ For facial prostheses of silicone- and acrylic
- ☑ Corrosion proof by low wear titanium casing
- ☑ Easy handling because of self centering design
- ☑ Good retention
- ☑ Easy to clean/simple hygiene
- ☑ Divergent implants possible
- ☑ Without risk with cardiac pacemakers
- ☑ No tensions on implants
  (compared to barr-attachments)

Examples of Straumann implants EO

1



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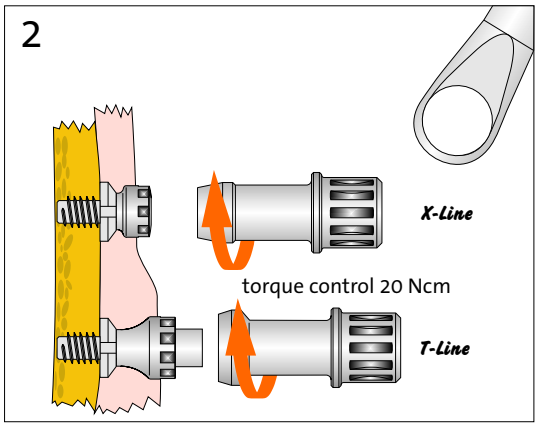

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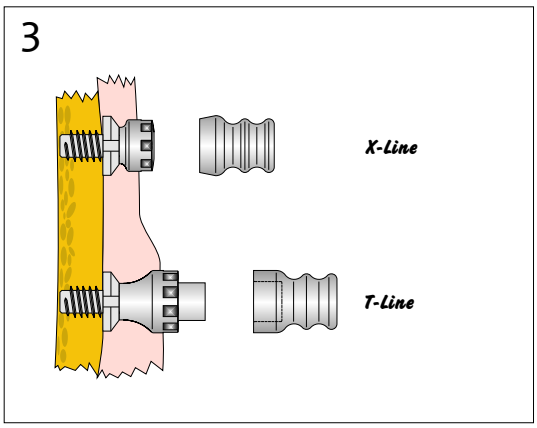
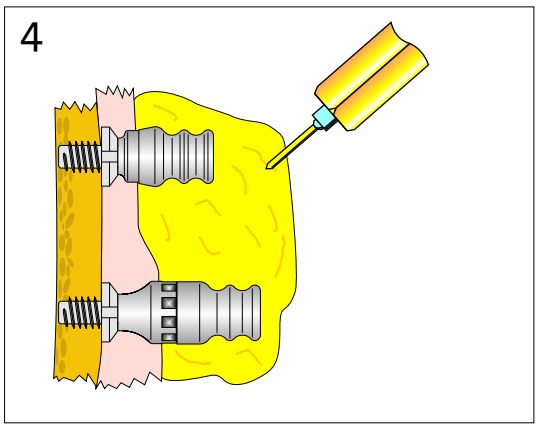
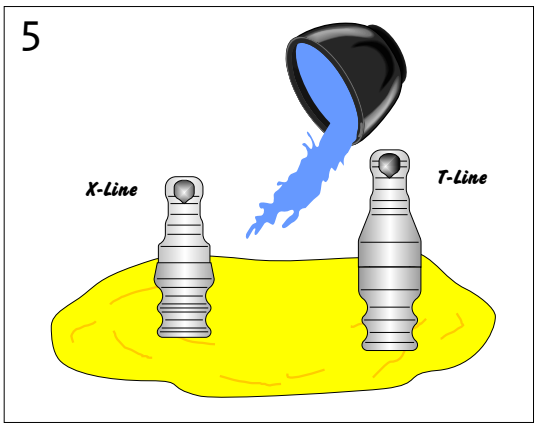


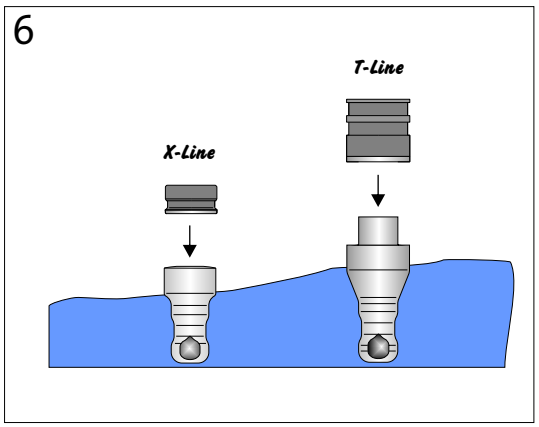
4



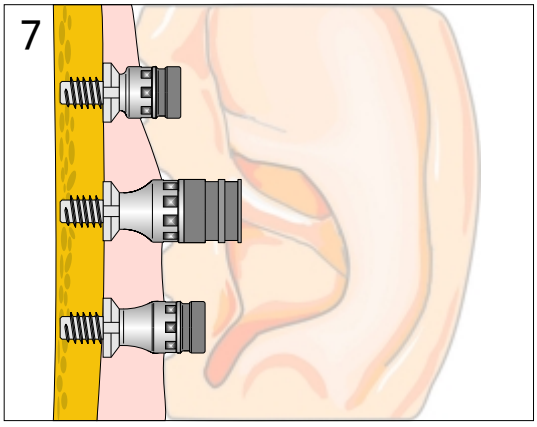
5

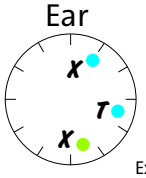
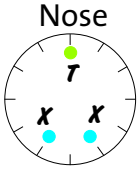
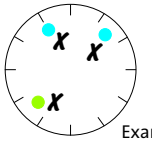


6



7



Possible implant positions	
Ear  Example left	Nose 
Orbita  Example right	● 2 implants ● 3 implants

Other arrangements and lines are possible!

System configuration facial prosthetics

steco system-technik

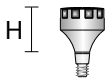
Product line / Implant system		X-Line	Z-Line	K-Line	T-Line
Head-diameter		4.8 mm	5.8 mm	5.2 mm	5.8 mm
Withdrawal force		**1.6 N** 163 g	**3.0 N** 306 g	**1.6 N** 163 g	**1.4 N** 143 g
Ankylos-EO Friadent	Distance height [mm]	5.40 6.90 8.90	5.40		5.90
Vistafix Cochlear (formaly Entific)	Distance height [mm]	3.50 5.00 6.50	4.75 6.00	3.00 4.50 6.00	5.20 7.20
	Implant platform RP				
Vistafix Cochlear (formaly Entific)	Distance height [mm]	3.70 7.35			
		Console spacer; Angulated abutment			
EO Straumann	Distance height [mm]	3.25 5.50		3.00	5.50
Epitec-Grid Stryker-Leibinger	Distance height [mm]	3.00 4.20	3.80 4.60	2.00 5.00 6.00	3.00 4.50
		direct[1]; for implant post	direct; for implant post	direct[1]	direct[1]; for implant post
IMZ Friadent	Distance height [mm]	3.50 3.50	4.00 4.00	2.25 2.25	5.20 5.20
	Implant diameter	ø 3.3[1]; ø 4.0[1]	ø 3.3; ø 4.0[1]	ø 3.3; ø 4.0	ø 3.3[1]; ø 4.0
Ti-Epiplating Medicon	Distance height [mm]	2.60 2.60	4.50	2.50 2.00	4.00 3.00
		f. prosthesis plates[1]; f. basic post	f. prosthesis plates	f. prosthesis plates[1]; f. basic post	f. prosthesis plates; f. basic post
Prosthesis magnet	for acrylic				
Plan view	Distance height [mm]	2.65	3.15	5.00	5.70
	for silicone				
Prosthesis magnet with collar	for acrylic				
cross section	Distance height [mm]	2.65	3.15		
	for silicone				
Impression post		especially orbita		Please use prosthesis magnet for impression!	
	Distance height [mm]	6.95 7.00	6.95		7.50
Laboratory replica	Distance height [mm]	9.00	10.00	7.50	10.50
Torque wrench inserts (see page 54)		For all implant-systems fitting torque wrench inserts are available. For Z-Line inserts also torque wrench inserts of T-Line can be used.			

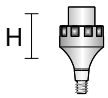
[1] Other heights are available. Please check it at the next pages.

Inserts for Ankylos-EO, Straumann EO

Ankylos-EO [FRIADENT]

X-Line	Distance height	Product number
H 5.4 mm 6.9 mm 8.9 mm	H 5.40 mm H 6.90 mm H 8.90 mm	I.03.03.X540 I.03.03.X690 I.03.03.X890

Z-Line	Distance height	Product number
 H 5.4 mm	H 6.10 mm	I.03.03.Z610

T-Line	Distance height	Product number
 H 5.9 mm	H 5.90 mm	I.03.03.T590

EO, ø 3.50 [STRAUMANN]

X-Line	Distance height	Product number
H 3.25 mm 5.5 mm	H 3.25 mm H 5.50 mm	048.517* 048.518*

K-Line	Distance height	Product number
H 3.0 mm	H 3.00 mm	I.36.01.K300

T-Line	Distance height	Product number
H 5.5 mm	H 5.50 mm	048.519*

Torque wrench inserts can be found on page 54.

For the correctness of the product numbers of the exclusive distributed products we don't take over guarantee.

Epitec-Grid, implant post ø 4.50 [STRYKER-LEIBINGER]

X-Line	Distance height	Product number
H 4.2 mm	H 4.20 mm	I.11.02.X420

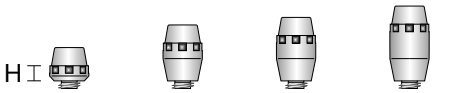
Z-Line	Distance height	Product number
H 4.6 mm	H 4.60 mm	I.11.02.Z460

T-Line	Distance height	Product number
H 4.5 mm	H 4.50 mm	I.11.02.T450

Epitec-Grid, direct ø 4.00 [STRYKER-LEIBINGER]

X-Line	Distance height	Product number
H 3.0 mm 4.5 mm 6.0 mm 8.0 mm	H 3.00 mm H 4.50 mm H 6.00 mm H 8.00 mm	I.11.01.X300 I.11.01.X450 I.11.01.X600 I.11.01.X800

Z-Line	Distance height	Product number
H 3.8 mm	H 3.80 mm	I.11.01.Z380

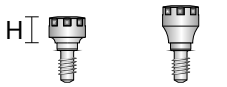
K-Line	Distance height	Product number
 H 2.0 mm 5.0 mm 6.0 mm 7.5 mm	H 2.00 mm H 5.00 mm H 6.00 mm H 7.50 mm	I.11.01.K200 I.11.01.K500 I.11.01.K600 I.11.01.K750

T-Line	Distance height	Product number
H 3.0 mm 6.0 mm 7.5 mm	H 3.00 mm H 6.00 mm H 7.50 mm	I.11.01.T300 I.11.01.T600 I.11.01.T750

Torque wrench inserts can be found on page 54.

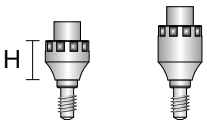
For the correctness of the product numbers of the exclusive distributed products we don't take over guarantee.

IMZ, ø 3.30 [FRIADENT]

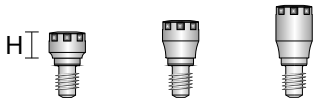
X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm	H 3.50 mm H 5.00 mm	I.05.01.X350 I.05.01.X500

Z-Line	Distance height	Product number
H 4.0 mm	H 4.00 mm	I.05.01.Z400

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	I.05.01.K225

T-Line	Distance height	Product number
 H 5.2 mm 7.2 mm	H 5.20 mm H 7.20 mm	I.05.01.T520 I.05.01.T720

IMZ, ø 4.00 [FRIADENT]

X-Line	Distance height	Product number
 H 3.5 mm 5.0 mm 7.0 mm	H 3.50 mm H 5.00 mm H 7.00 mm	I.05.02.X350 I.05.02.X500 I.05.02.x700

Z-Line	Distance height	Product number
H 4.0 mm 6.5 mm	H 4.00 mm H 6.50 mm	I.05.02.Z400 I.05.02.Z650

K-Line	Distance height	Product number
H 2.25 mm	H 2.25 mm	I.05.02.K225

T-Line	Distance height	Product number
H 5.2 mm	H 5.20 mm	I.05.02.T520

Ti-Epiplating,for prostheses plates [MEDICON]

X-Line	Distance height	Product number
H 2.6 mm 4.5 mm 6.0 mm	H 2.60 mm H 4.50 mm H 6.00 mm	68.80.68* I.34.01.X450 I34.01.X600

Z-Line	Distance height	Product number
H 4.5 mm	H 4.50 mm	I.34.01.Z450

K-Line	Distance height	Product number
H 2.5 mm 4.5 mm	H 2.50 mm H 4.50 mm	I.34.01.K250 I.34.01.K450

T-Line	Distance height	Product number
H 4.0 mm	H 4.00 mm	I.34.01.T400

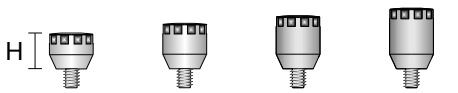
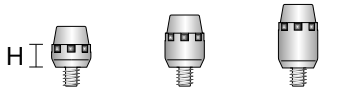
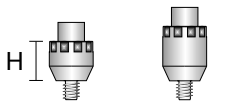
Ti-Epiplating, for basic posts [MEDICON]

X-Line	Distance height	Product number
H 2.6 mm	H 2.60 mm	68.80.69*

K-Line	Distance height	Product number
H 2.0 mm	H 2.00 mm	I.34.02.K200

T-Line	Distance height	Product number
H 3.0 mm	H 3.00 mm	I.34.02.T300

Vistafix (corresponds Brånemark RP) **[COCHLEAR]** (before times Entific)

X-Line	**Distance height**	**Product number**
H 3.5 mm 5.0 mm 6.5 mm 8.0 mm	H 3.50 mm H 5.00 mm H 6.50 mm H 8.00 mm	I.02.01.X350 I.02.01.X500 I.02.01.X650 I.02.01.X800
Z-Line	**Distance height**	**Product number**
 H 4.75 mm 6.0 mm 7.0 mm 8.0 mm	H 4.75 mm H 6.00 mm H 7.00 mm H 8.00 mm	I.02.01.Z475 I.02.01.Z600 I.02.01.Z700 I.02.01.Z800
K-Line	**Distance height**	**Product number**
 H 3.0 mm 4.5 mm 6.0 mm	H 3.00 mm H 4.50 mm H 6.00 mm	I.02.01.K300 I.02.01.K450 I.02.01.K600
T-Line	**Distance height**	**Product number**
 H 5.2 mm 7.2 mm	H 5.20 mm H 7.20 mm	I.02.01.T520 I.02.01.T720

Vistafix (corresponds Brånemark) Console spacer **[COCHLEAR]** (before times Entific)

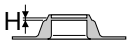
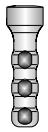
X-Line	**Distance height**	**Product number**
H 3.7 mm	H 3.70 mm	I.02.02.X370

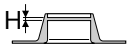
Vistafix (corresponds Brånemark) **A**ngulated **A**butment **[COCHLEAR]** (before times Entific)

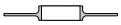
X-Line	**Distance height**	**Product number**
H 7.35 mm	H 7.35 mm	I.02.05.X735

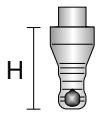
Torque wrench inserts can be found on page 54.

For the correctness of the product numbers of the exclusive distributed products we don't take over guarantee.

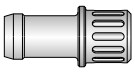
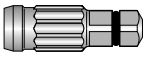
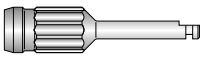
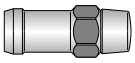
X-Line	Description	Height	Product number
	Prosthesis magnet for acrylic	H 2.65 mm	U.00.01.X265
	Prosthesis magnet for silicone	H 2.65 mm	U.00.02.X265
	Prosthesis magnet with collar	H 2.65 mm	U.00.01.X265K
	Prosthesis magnet with collar for silicone	H 2.65 mm	U.00.02.X265K
	Positioning cuff supragingival	H 0.30 mm	P.00.01.X1
	Positioning cuff subgingival	H 0.30 mm	P.00.01.X2
	Impression post	H 6.95 mm	A.00.02.X695
	Impression post, especially orbita	H 7.00 mm	A.00.01.D480
	Laboratory replica	H 9.00 mm	M.00.01.X900
	Laboratory replica (long shank)	H 16.00 mm	M.00.01.X1600

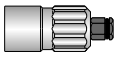
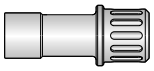
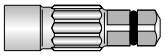
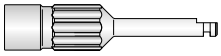
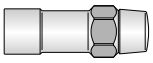
Z-Line	Description	Height	Product number
	Prosthesis magnet for acrylic	H 3.15 mm	U.00.01.Z315
	Prosthesis magnet for silicone	H 3.15 mm	U.00.02.Z315
	Prosthesis magnet with collar for acrylic	H 3.15 mm	U.00.01.Z315K
	Prosthesis magnet with collar for silicone	H 3.15 mm	U.00.02.Z315K
	Positioning cuff supragingival	H 0.50 mm	P.00.03.Z1
	Impression post	H 6.95 mm	A.00.02.Z695
	Laboratory replica	H 10.00 mm	M.00.01.Z1000

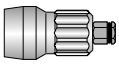
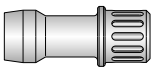
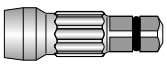
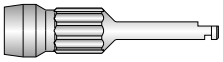
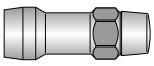
K-Line	Desciption	Height	Product number
	Prosthesis magnet for acrylic	H 5.00 mm	U.00.01.K500
	Prosthesis magnet for silicone	H 5.00 mm	U.00.02.K500
	Positioning cuff supragingival		P.00.01.K1
	Positioning cuff subgingival		P.00.01.K2
	Resilience ring	H 0.30 mm	P.00.05.K1
	Laboratory replica	H 7.50 mm	M.00.01.K750
	Plesase use prosthesis magnet for impression!		

T-Line	Description	Height	Product number
	Prosthesis magnet for acrylic	H 5.70 mm	U.00.01.T570
	Prosthesis magnet for silicone	H 5.70 mm	U.00.02.T570
	Positioning cuff	H 0.30 mm	P.00.01.T2
	Impression post	H 7.50 mm	A.00.02.T750
	Laboratory replica	H 10.50 mm	M.00.01.T1050

Torque wrench inserts for facial prosthetics

X-Line	Ratchet system	Lenght	Product number
	Epitec	12.00 mm	H.11.01.X1
	Straumann	16.75 mm	046.146*
	Square connection (US-pat.) Fits to following ratchets: Dynatorq, Dentsply (old), Paragon, Screw-Vent, Steri-Oss	18.25 mm	H.00.04.X1
	ISO 204 (contra angle)	25.80 mm	H.00.04.X2
	Hexagonal conncetion Fits to following ratchets: Bredent, Camlog, IMZ, prowital	16.75 mm	H.00.04.X3

K-Line	Ratchet system	Lenght	Product number
	Epitec	14.35 mm	H.11.01.K1
	Straumann	19.10 mm	H.01.01.K1
	Square connection (US-pat.) Fits to following ratchets: Dynatorq, Dentsply (old), Paragon, Screw-Vent, Steri-Oss	20.60 mm	H.00.04.K1
	ISO 204 (contra angle)	28.10 mm	H.00.04.K2
	Hexagonal connection Fits to following ratchets: Bredent, Camlog, IMZ, prowital	19.10 mm	H.00.04.K3

T-Line	Ratchet system	Lenght	Product number
	Epitec	14.70 mm	H.11.01.T1
	Straumann	19.45 mm	H.01.01.T1
	Square connection (US-pat.) Fits to following ratchets: Dynatorq, Dentsply (old), Paragon, Screw-Vent, Steri-Oss	20.95 mm	H.00.04.T1
	ISO 204 (contra angle)	28.50 mm	H.00.04.T2
	Hexagonal conncetion Fits to following ratchets: Bredent, Camlog, IMZ	19.45 mm	H.00.04.T3

Z-Line inserts can be screwed in also with the torque wrench inserts of T-Line.

For the correctness of the product numbers of the exclusive distributed products we don't take over guarantee.

Implant distribution partner and original part numbers

Distribution partner

All product numbers marked with an asterisk *) refer to products which are distributed exclusively by implant manufacturers. The universal denture Titanmagnetics, impression post and laboratory replica can also be ordered from the companies specified . The German telephone numbers as well as the homepage of our distribution partners are listed below.

For the correctness of the product numbers of the exclusively distributed products we assume no liability. Please contact the respective distributor.

Implant manufacturer	Telephone order line	Homepage
Bego Implant Systems	+49 (0)421-20 28-248	www.bego-implantology.com
BPI	+49 (0)7031-763 17-11	www.bpi-implants.com
Dentaurum Implants	+49 (0)7231-803 210	www.dentaurum.de
Friadent	+49 (0)621-4302-010	www.friadent.de
Heraeus Kulzer	+49 (0)6181-35-4062	www.iqnect.de
Komet/Gebr. Brasseler	+49 (0)5261-701-700	www.kometdental.de
Medicon	+49 (0)7462-2009-0	www.medicon.de
Schütz	+49 (0)6003-814-220	www.schuetz-dental.de
SIC invent	+49 (0)800-742 468 368	www.sic-invent.com
Straumann	+49 (0)761-450 13 33	www.straumann.de
ZL-Microdent	+49 (0)2338-801-55	www.zl-microdent.de
Distribution Switzerland		
Kaladent AG, Urdorf	+41 (0)44-732 34 34	www.kaladent.ch
Distribution Austria		
ZPP, Eisenerz	+43 (0)3848-60007	www.dental-markt.com
Distribution Spain		
Kuss Dental S.L.	+34 (0)91-736 23 17	www.kuss-dental.com

You find the original part numbers of our sales partner below.

Bone Trust of Medical Instinct

K-Line

Insert H 2.25	164-344022*
Denture magnet	164-344050*
Positioning cuff No. 1	164-344060*
Torque wrench insert	164-344070*

BPI of BPI

X-Line

Insert H 2.75	20060*
Denture magnet	20061*
Torque wrench insert	46700*

K-Line

Insert H 2.25	21060*
Denture magnet	21061*
Resilience ring	21062*
Torque wrench insert	46600*

EO of Straumann

X-Line

Insert H 3.25	048.517*
Insert H 5.5	048.518*

T-Line

Insert H5.5	048.519*

For the correctness of the product numbers of the exclusive distributed products we don't take over guarantee.

Impla of Schütz

X-Line

Insert ø 4.2 H 3.0	63 50 80*
Insert ø 4.2 H 4.5	63 50 81*
Denture magnet	63 50 82*
Positioning cuff No. 1	63 50 83*
Positioning cuff No. 2	63 50 84*
Impression post	63 50 85*
Laboratory replica	63 50 86*
Torque wrench insert	63 50 87*

K-Line

Insert ø 4.2 H 2.25	63 50 95*
Insert ø 5.3 H 2.25	63 50 94*
Denture magnet	63 50 96*
Positioning cuff No. 1	63 50 97*
Laboratory replica	63 50 98*
Torque wrench insert	63 50 99*

MicroPlant of Komet/Gebr. Brasseler

K-Line

Insert ø 3.2 H 2.5	9881L1*
Insert ø 3.2 H 3.5	9881L2*
Denture magnet	9882*
Resilience ring	9883*
Laboratory replica	9885*
Torque wrench insert	9884*

Semados of Bego Implant System

X-Line

Insert H 4.0	55850*
Insert H 5.5	55851*
Set: Denture magnet + Positioning cuff No. 2	55872*
Set: Impression post + Laboratory replica	55853*
Torque wrench insert	55852*

SIC of SIC invent

K-Line

Insert ø 4.2 H 2.25	935095*
Insert ø 5.3 H 2.25	935094*
Denture magnet	935096*
Positioning cuff No. 1	935097*
Laboratory replica	935098*
Torque wrench insert	935099*

Straumann of Straumann

X-Line

Insert H 2.35	048.511*
Denture magnet	048.515*
Positioning cuff No. 1	048.516*
Impression post	048.014*
Laboratory replica	048.121*
Torque wrench insert	046.146*

Ti-Epiplating of Medicon

X-Line

Insert for prosthesis plates, H 2.6	68.80.68*
Insert for basis post, H 2.6	68.80.69*

Tiologic of Dentaurum Implants

X-Line

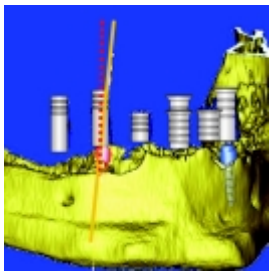
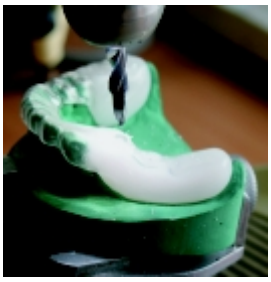
Insert S-Serie, H 3.0	386-170-00*
Insert S-Serie, H 4.5	386-171-00*
Insert M-Serie, H 3.0	386-270-00*
Insert M-Serie, H 4.5	386-271-00*
Insert L-Serie, H 3.0	386-370-00*
Insert L-Serie, H 4.5	386-371-00*
Denture magnet	386-716-00*
Positioning cuff No. 1	386-718-00*
Positioning cuff No. 2	386-720-00*
Impression post	386-712-00*
Laboratory replica	386-714-00*
Torque wrench insert	387-670-00*

ZL-Duraplant of ZL-Microdent

X-Line

Insert H 3.75	10910*
Insert H 5.25	10911*
Denture magnet	10912*
Positioning cuff No. 1	10913*
Positioning cuff No. 2	10914*
Impression post	10915*
Laboratory replica	10916*
Torque wrench insert	10917*

For the correctness of the product numbers of the exclusive distributed products we don't take over guarantee.

Pre diagnostic planning plays an increasingly important role in the implantology. Planning software with 3D-views into the implant region facilitate the surgical work noticeably. The entire surgical procedure for each desired indication can be planned, examined virtually and corrected if necessary already in advance. The thickness and density of the jawbone can be determined likewise the position of the nerve. The implant planning is further improved, through the appropriate implant and abutment libraries.

Titanium single sleeves are used in the pre implantologic radiology (dental-CT or OPG) as planning sleeves. Subsequently, a surgical template with one-piece **titanium sleeves** (5 or 10 mm) or **titanium double sleeves** (length inner sleeve 6 or 10 mm, outer sleeve 5 or 6 mm) can serve as a guidance assistance during the pilot drilling.

The single- or inner sleeves are co-ordinated with their diameters from 2.0 to 2.8 mm with the common pilot drills. The internal diameter of the outer sleeve offers a good guidance with 3.5 mm also for the following drilling procedure.
A simple radiographical planning can be achieved also with titanium reference balls (diameter 5.0 mm). It offers however only the possibility of the estimation of the mucous membrane thickness.

Titanium guided sleeves are used for laboratory manufactured drill templates for full guided surgery.

Attention:
Exclusively distributed sleeves by other companies can deviate from the dimension data specified above (page 62).

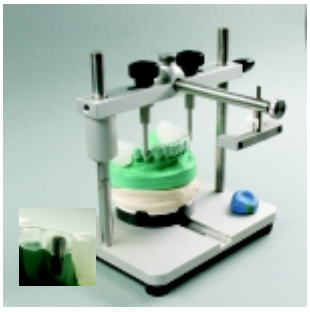
1. Production of the planning model

2. Wax up

3. Duplicate model with thermoforming blank

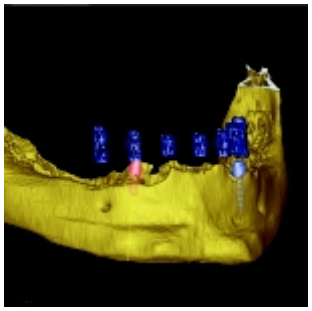
4. Pressure moulded planning template

5. Fill x-ray opaque material into pressure moulded template

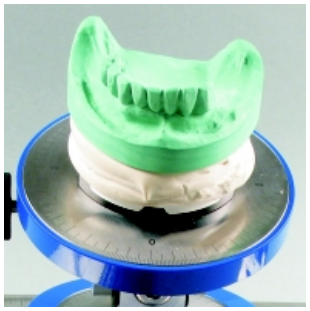


6. Attaching bearing sleeves - for example with the modelpositioner

7. Bearing sleeves Alternative: Planning sleeves at each possible implant position (small picture)



8. 3D planning with software on the basis of diagnostic imaging procedures (CT, DVT, etc.)



9. Conversion of planned position to the model (for example coOrdinator®)

10. Insert sleeves into drilling template

11. Put sleeves into drilling template

Single sleeves
Inside-ø 2.35 mm
Double sleeves
Inside-ø 2.0 - 3.5 mm

Titanium single sleeves and reference balls

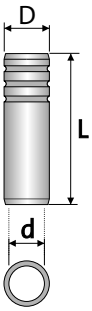
Titanium single sleeves **D 3.00 mm**

Product number	Dimensions	Fig. 1:1
M.27.01.D235	d 2.35 mm, L 10 mm	
M.27.01.D235L5	d 2.35 mm, L 5 mm	

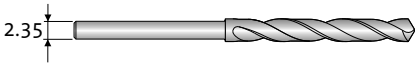
D = Outer diameter

d = Inner diameter

L = Length

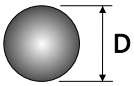


Template drill and impression tool

Product number	Description	Fig.
M.27.01.B300	**Template drill** for titanium single sleeves	
M.27.01.E235	**Impression tool** for titanium single sleeves	

Titanium reference ball

Product number	Dimensions	Fig. 1:1
M.27.09.D250	D 2.50 mm	
M.27.09.D500	D 5.00 mm	



D = Outer diameter

The titanium sleeves are sold in 10 pieces per packaging unit.
The titanium reference balls are sold in 10 pieces (ø 5.00 mm) and 3 pieces (ø 2.50 mm) per packaging unit.
Other ball diameters are available on request.

We advise you gladly!

Denture duplicator

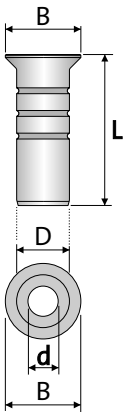
Product number	Description	**Fig.** (minimised)
O.27.00.O389	For simple production of planning templates. Doubles the existing prosthesis.	

Titanium double sleeves

Titanium double sleeves

Product number	Dimensions	Fig. 1:1
Titanium outer sleeve	**D 4.00 mm**	
M.27.02.D350	d 3.50 mm, L 6 mm	
M.27.02.D350L5	d 3.50 mm, L 5 mm	
Titanium inner sleeve	**D 3.50 mm**	
M.27.03.D160L6	d 1.60 mm, L 6 mm	
M.27.03.D200	d 2.00 mm, L 10 mm	
M.27.03.D200L6	d 2.00 mm, L 6 mm	
M.27.03.D220L6	d 2.20 mm, L 6 mm	
M.27.03.D235	d 2.35 mm, L 10 mm	
M.27.03.D235L6	d 2.35 mm, L 6 mm	
M.27.03.D250L6	d 2.50 mm, L 6 mm	
M.27.03.D280L6	d 2.80 mm, L 6 mm	

tube in tube



L = Length

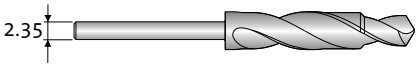
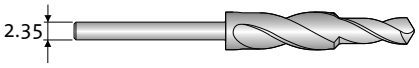
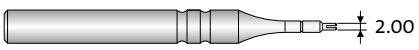
D = Outer diameter

d = Inner diameter

B = Collar diameter ø 5.00 mm (not applicable with single sleeves)

The titanium sleeves are sold in 10 pieces per packaging unit. Other sleeves are available on request.

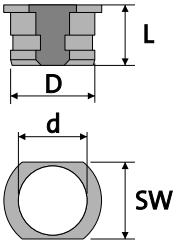
Template drill and impression tools

Product number	Description	Fig.
M.27.02.B400	**Template drill** for titanium **outer sleeves**	
M.27.03.B350	**Template drill** for titanium **inner sleeves**	
M.27.02.E350	**Impression tool** for titanium **outer sleeves**	
M.27.03.E200	**Impression tool** for titanium **inner sleeves d 2.00**	
M.27.03.E235	**Impression tool** for titanium **inner sleeves d 2.35**	

Titanium guide sleeves

Titanium guide sleeves

Product number	System	Dimensions d	D	L	SW
M.27.15.**D410**	NB NP	ø 4.10 mm	4.70 mm	3.50 mm	4.30 mm
M.27.15.**D500**	NB RP	ø 5.00 mm	6.00 mm	3.50 mm	5.60 mm
M.27.15.**D620**	NB WP	ø 6.20 mm	7.00 mm	3.50 mm	6.60 mm
M.27.15.**D450**	Camlog	ø 4.50 mm	5.50 mm	4.00 mm	5.10 mm
M.27.15.**D448**	Xive + Ankylos ND	ø 4.48 mm	5.50 mm	4.00 mm	5.10 mm
M.27.15.**D520**	Xive WD	ø 5.20 mm	6.00 mm	4.00 mm	5.60 mm
M.27.15.**D490**	Ankylos WD	ø 4.90 mm	5.60 mm	4.00 mm	5.20 mm
1650532*	*Only available at Astra Tech	ø 4.70 mm	5.50 mm	4.00 mm	5.10 mm
1650533*		ø 5.70 mm	6.50 mm	4.00 mm	6.10 mm



L = Lenght

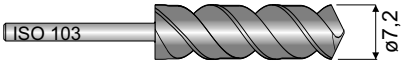
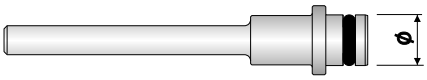
d = Inner diameter

D = Diameter

SW = Wrench size

The titanium sleeves are sold in 10 pieces and 5 pieces per packaging unit. Other sleeves are available on request.

Template drill and sleeve holder

Product number	Description	Fig.
M.27.15.B720	**Template drill** for titanium **guide sleeves**	
M.27.15.D410	**Sleeve holder** for titanium **guide sleeves for D410**	
M.27.15.D500	**Sleeve holder** for titanium **guide sleeves for D500**	
M.27.15.D620	**Sleeve holder** for titanium **guide sleeves for D620**	
M.27.15.D450	**Sleeve holder** for titanium **guide sleeves for D450**	
M.27.15.D520	**Sleeve holder** for titanium **guide sleeves for D520**	
M.27.15.D448	**Sleeve holder** for titanium **guide sleeves for D448**	
M.27.15.D490	**Sleeve holder** for titanium **guide sleeves for D490**	

Titanium sleeves of distribution partner

The following sleeves can be ordered exclusively with our respective sales partners:

Titanium sleeves of C.Hafner

Double sleeves

Telephone: +49 (0)7231-920-381

Outer-ø (D) 4.5 mm	Inner-ø (d)	Order number with C.Hafner
L5	1.60 mm	7516*
	2.00 mm	7518*
	2.20 mm	7519*
	2.35 mm	7520*
	2.40 mm	7522*
	2.50 mm	7523*
	2.80 mm	7524*
	3.00 mm	7525*
	3.20 mm	7526*
	3.30 mm	7527*
	3.40 mm	7528*
	3.50 mm	7529*
	3.80 mm	7687*

Outer-ø (D) 5.2 mm	Inner-ø (d)	
L5	4.50 mm	7517*

Sleeve test set 7558*

consists of 1 outer sleeve and 11 inner sleeves of inner-ø from 2.00 mm to 3.50 mm (altogether 12 sleeves)

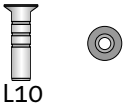
Titanium sleeves of Bego

Double sleeve

Telephone: +49 (0)421-20 28-248

Double sleeves

Telephone: +49 (0)421-20 28-248

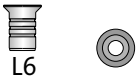
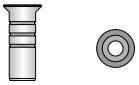
Outer-ø (D) 2.5 mm	Inner-ø (d)	Order number with Bego
 L10	1.60 mm	55512*

Outer-ø (D) 3.5 mm	Inner-ø (d)	Order number with Bego
L6	2.54 mm	55513*

Titanium sleeves of Dentaurum

Inner sleeves

Telephone: +49 (0)7231-803 210

Outer-ø (D) 3.5 mm	Inner-ø (d)	Order number with Dentaurum
 L6	2.00 mm	381-422-00*
 L10	2.00 mm	381-420-00*

Titanium sleeves of siCAT

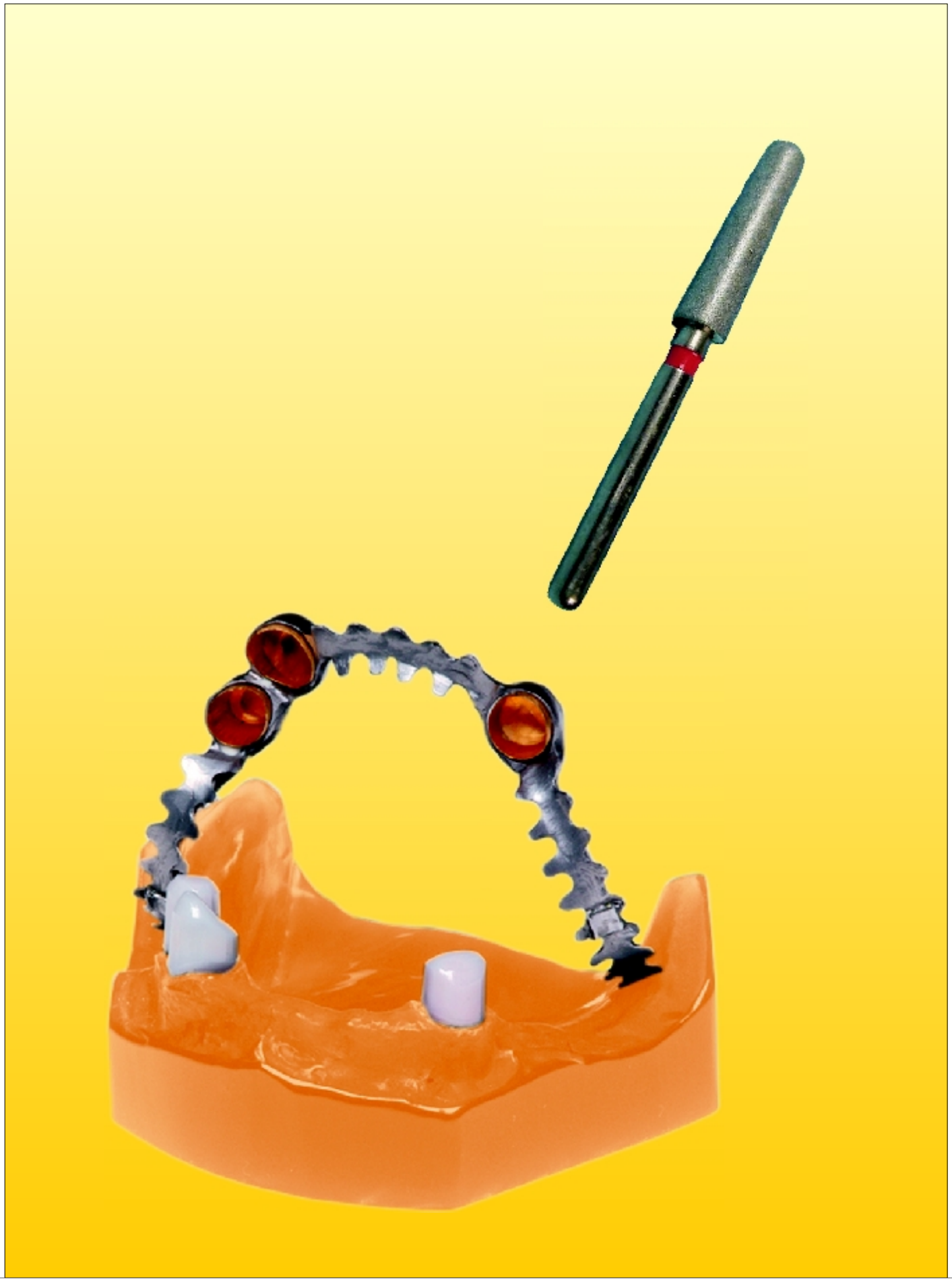
Single sleeves

Telephone: +49 (0)6251-16-1616

Please ask sicat for possible diameters and supported implant systems.

All product numbers marked with an asterisk *) refer to products which are distributed exclusively by implant manufacturers. For the correctness of the product numbers of the exclusive distributed products we assume no liability. Please contact the respective distributor.

IMAGO®



Zirconia
The challenging material

Patients more and more demand dental restorations with thptimal esthetic. All-ceramic dental restorations give a he lowest allergic potential. Furthermore they prefer oigh level of biocompatibility and optimal esthetic appearance. The brilliant attributes of modern dental ceramics face an ambitious handling.

Although the modern materials seem to be powerful and indestructible they are very sensitive during machining.

The problem is heat introduced during cutting or grinding. It leads to cracks in the structure. Modern CAD/CAM systems minimize this problem by an integrated cooling. Due to technology reasons the remaining machined surface is not smooth enough for adhesion based therapy concepts with ceramic primary crowns and galvanic copings.

In order to offer the benefits of zirconia and other modern ceramic materials, dental technicians/doctors need the right tools for machining.

With **IMAGO®** an extensive range of helpful tools can be used for general production of all-ceramic dentures. It supplements all modern CAD/CAM systems.

IMAGO® is the innovative system for the treatment of zirconia and all-ceramics. It's mainly made for the production of all-ceramic primary crowns with galvanic copings (acc. Dr. P. Weigl, University of Frankfurt). Particularly the surface processing of primary crowns from zirconia is facilitated with the high-quality diamond grinders.

IMAGO® at the same time offers also possibilities for the professional treatment of high-strength ceramic dental materials generally.

Control devices for dental turbines with appropriate water spray for the wet treatment of all-ceramics either in the milling device or while free hand working as well as splash guards are basic elements of the IMAGO system.

Special airbrush systems make an even application of silver conductive varnish (galvano secondary crowns) possible as well as the application of bonder and opaquer on frameworks in ceramic veneering technology.

Faster and safer adhesive fixation!

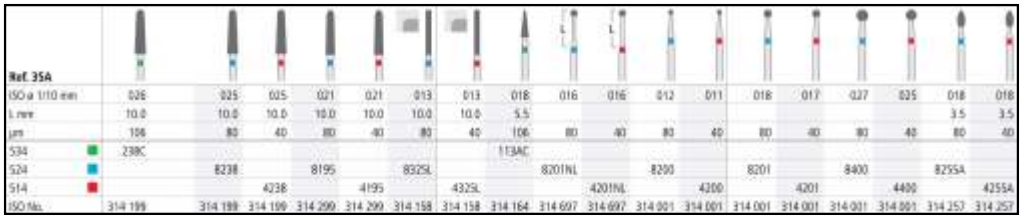
IMAGO C-Link protects the silan layer on inlays or veneers made of silicate ceramics.
The light curing C-Link connector is applied very thin on the adherend and forms the connection to the silan. The adhesive adheres to connector and the tooth. Etching and silanisation of the veneer or inlay can be done in the laboratory or before the patient enters the office. The connector allows contamination with try in masses and just has to be decreased before gluing.
The set comes with hydrofluoric acid, silan and the connector.

IMAGO® C-Link® Set

Abb.	Beschreibung	product number
	IMAGO® C-Link® Set hydrofluoric acid 6 ml silan 10 ml, connector 5 ml 10 mixing moulds 20 brushes one-way 10 adhesiv sticks	S.44.09.CL01

The C-Link set is available in germany only. Please contact us!

Intensiv Zirkon Set
The set contains 18 diamond grinding bars in different figures and granulations. They were configured particularly for the free hand machining of zirconia.

Fig.	Description	product number
	Grinder set 18 diamond grinders, different figures and granulations 	O.44.08.S18

Intensiv diamond grinder refill
Each grinder can be order in the 6er pack.

• cone round	125 µm	Ø 2.6 mm	O.44.08.K125R.26
• cone round	80 µm	Ø 2.5 mm	O.44.08.K080R.25
• cone round	40 µm	Ø 2.5 mm	O.44.08.K040R.25
• cone pointed	80 µm	Ø 2.3 mm	O.44.08.K080S.23
• cone pointed	40 µm	Ø 2.2 mm	O.44.08.K040S.22
• cylinder	80 µm	Ø 1.3 mm	O.44.08.ZY080.13
• cylinder	40 µm	Ø 1.3 mm	O.44.08.ZY040.13
• disk	125 µm	Ø 1.8 mm	O.44.08.KE125.18
• long-necked ball	80 µm	Ø 1.8 mm	O.44.08.KU080.18L
• long-necked ball	40 µm	Ø 1.7 mm	O.44.08.KU040.17L
• ball	80 µm	Ø 1.2 mm	O.44.08.KU080.12
• ball	40 µm	Ø 1.1 mm	O.44.08.KU040.11
• ball	80 µm	Ø 1.8 mm	O.44.08.KU080.18
• ball	40 µm	Ø 1.7 mm	O.44.08.KU040.17
• ball	80 µm	Ø 2.7 mm	O.44.08.KU080.27
• ball	40 µm	Ø 2.5 mm	O.44.08.KU040.25
• bud	80 µm	Ø 2.2 mm	O.44.08.KN080.22
• bud	40 µm	Ø 2.1 mm	O.44.08.KU040.21

The Intensiv Set is available in germany only. Please contact us!

IMAGO®Grind

The special formed diamond grinders allow an exact machining of individual attachment surfaces in zirconia or other ceramics. By the gradated grain (80-4 µm) surface can be smoothed without an additional polish.

Fig.	Description	Product number
	Starter set 1 diamond disk 15 grinders: 3 shapes - **A** 2° ø 2.5, **B** 0° ø 1.79, **C** 0° ø 1.2 5 grain sizes - 80, 40, 15, 8, 4 µm	S.44.01.16
	Diamond grinder refill Combine 10 grinders freely according your needs. Select the necessary figures and the desired grain size.	S.44.01.10

Granulation/ µm Colour	80 blue	40 red	15 yellow	08 orange	04 pink
Fig. A					
Fig. B					
Fig. C					

Shapes

Fig. A (2°, ø 2.5)

Fig. B (0° ø 1.79)

Fig. C (0° ø 1.2)

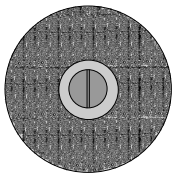
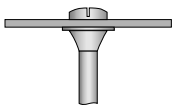
Definition of the number:

Product number: O.44.01. Figure Grain

Example: O.44.01.A80

(Figure A, Grain 80 µm)

Request the fax form for your supplementory order!

 	**Diamond disk** ø 22.5 mm	O.44.01.D01

IMAGO®Argentobrush

It's an airbrush system for applying silver conductive varnish. The die can be coated with a very thin layer (4- 6 µm) necessary for the best detail reproduction with the pistol designed specially for silver conductive varnish.

Fig.	Description	Product number
	• **Starter set** in the suit-case Consisting of: airbrush pistol, silver conductive varnish 30 ml, cleansing liquid 100 ml, masking lacquer 20 ml	S.44.02.01
	• Refill bottle silver conductive varnish 30 ml	L.44.02.LL030
	• Refill bottle cleansing liquid 250 ml	O.44.02.RE250
	• Refill bottle masking lacquer 10 ml (light curing)	O.44.02.AL010

IMAGO®Layerbrush

It's an airbrush system especially designed for the application of opaquer or bonder liquids on frameworks.

Fig.	Description	Product number
	• **Starter set** in the suit-case Consisting of: airbrush pistol, carrier liquid, agate spatula, hose connector lid and 4 supply glasses	S.44.03.01
	• Refill bottle 1 litre carrier liquid	O.44.03.TF1000
	• Supply glasses (6 pieces)	O.44.03.VG01
	• Agate spatula	O.44.03.AS01

Accessories for both airbrush systems

Fig.	Description	Product number
	• Reducer	O.44.03.DM01
	• Spiral hose approx. 3 m flexibly	O.44.03.SS01
	• Cleaning needle	O.44.03.RN01
	• Sprayoutbottle	L.44.03.GF01
	• Clutch	L.44.02.KP01

IMAGO®Shelter

Splash guard for the work with the water turbine.

Fig.	Description	Product number
	The **IMAGO®Pot** allows the technician wet machining in a normal milling machine. By its magnetic ground it can be fixed on the magnet base of the milling equipment. The water runs by a hose into any collecting bin.	L.44.04.P01
	The **IMAGO®Tube** can be used for freehand working with a water-cooled turbine. So water and swarf do not pullute the desk.	L.44.04.T02

IMAGO®Spraycontrol

The spraycontrol is a compact control unit for a turbine hand piece and has an integrated pump. The speed of the turbine as well as the strength of the cooling water spray can be regulated independently. Even at low turbine speed the full water cooling is available. The spraycontrol can be attached to any size of water container. The annoying refill of the cooling water is void likewise the necessity for a direct water connections. The equipment can be attached to almost all usual water-cooled turbines with 4-hole clutch.

Fig.	Description	Product number
	Spraycontrol Turbine control unit with pump and foot starter	G.44.05.02

IMAGO®Eco1

The turbine control unit contains a 1 litre water tank the sufficient supply for wet grinding. Turbine speed, water amount and haze can be adjusted separately. So even at low turbine speed the full water cooling is provided.

Fig.	Description	Product number
	Eco1 Turbine control unit with 1 litre tank and foot starter	G.44.05.03

IMAGO®C.M.Turbine

The C.M.Turbine has a water throughput of about 100ml/min. By adapter sleeves it can be used in each milling equipment. With its diameter of 16 mm it also fits to milling equipment (like F1 by Degudent) without adapters.

Fig.	Description	Product number
	• **C.M. Turbine** inclusive adapter sleeve for your milling equipment • Grease cartouche, refill package (6 parts)	G.44.06.CMT01 O.44.06.NACHFÜLLFETT

IMAGO®Lux

The lux is a plug-on lighting with optical cable suitable for 16 mm of turbine hand pieces (C.M. Turbine) or milling spindles (Degudent F1 or Schick). The LED lighting unit can be dimmed.

Fig.	Description	Product number
	• **IMAGO® Lux LED light set** Consisting of: Light ring with light wire, controller and power pack	S.44.07.LUX01
	• Light ring with light wire (single sale)	L.44.07.RL01
	• Turbine housing sleeves to adapt the lighting to Bien Air compatible turbines (for example TDS 890)	L.44.07.TGH01

Prosthodontics

- Magnetically retained (implant secured) total prostheses

  from: J. Wirz, K. Jäger, F. Schmidli

  out of: Schweizer Monatsschrift Zahnmedizin 104/94

- Titanmagnetics® as aid for fixing dentures at patients with difficult anatomic situation in the superior and inferior maxillary bone

  from: M. Vesper, A. Gbara, G. Gehrke, D. Hellner, R. Schmelzle

  out of: ZZI 4/95

- Magnetically retentive total prosthesis on implants means wearing comfort and self-confidence

  from: U. Ziesche

  out of: Das Internationale Zahntechnik Magazin 10/98

- The new conical titanium magnetic insert in hybrid prosthetics
  from: J. Wirz, K. Jäger

  out of: Schweizer Monatsschrift Zahnmedizin 110/00

These arcticles you can request as free special edition. You find an extensive and current bibliography in the internet under www.steco.de.

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General terms and conditions

1. General

1.1 These general business terms and conditions apply additionally to all present an future transactions between steco-system-technik GmbH & Co. KG and its customers, even when no explicit reference is made to them in later transactions.

1.2 The inclusion of other party business and procurement terms is expressly prohibited if such terms vary from our terms and conditions, contain additional provisions or are not expressly agreed to in writing. Our making of delivery may not be construed as granting consent or approval.

2. Offer / Conclusion of Contract

Our offers are not binding. A contract is only then concluded when we provide a written confirmation of the customer's order or execute the order (offer acceptance). Any oral agreements or assurances made at the time the contract is concluded are only valid if confirmed in writing by us. Similarly, any later changes or amendments to the contract will only be valid if made in writing. Orders for custom-made products according to § 3, Section (8) of the German Medical Devices Act (MPG) must be made in writing and contain the information required under the act.

3. Right to Make Modifications

We reserve the right to make modifications in the materials and designs contained in any published product descriptions, provided that such modifications do not significantly impair the ordinary use of the system components or their use as provided for under the contract, or otherwise affect any guaranteed product characteristics or qualities.

4. Prices

Our stated prices are ex works in euros and do not include the costs of packaging, freight and insurance. The respective list price for our products on the date of order acceptance will be definitive for pricing purposes. We reserve the right to correct our offer and invoice prices in case of miscalculations or other errors. Value-added tax will be invoiced as a separate item in accordance with the applicable statutory regulations in force on the date of delivery or performance.

5. Payments

5.1 Invoices are payable in cash with no discounts immediately upon receipt and at no cost to steco-system-technik GmbH & Co. KG.

5.2 Checks will be accepted as conditional payment until such time as the checks have cleared and funds have been collected against them.

5.4 We will charge a late penalty of 10 percentage points per year above the base interest rate (§ 247, German Civil Code (BGB)) without providing a reminder if the payment deadline has not been met. We reserve the right to assert claims for greater damages.

5.5 The customer may neither withhold payments that are not based on the same legal relationship, nor set-off payments of any claims that are not legally binding or undisputed by us.

5.6 Payments from outside Germany will be made in euro currency.

6. Delivery

6.1 The delivery periods or deadlines stated are non-binding if not expressly confirmed by us in writing. Binding delivery deadlines will only be agreed to in isolated cases and are only valid when confirmed by us in writing. Compliance with such deadlines is conditional upon the timely receipt from the customer of all the documents, approvals, releases and information required to execute the order. The delivery period begins only when all prerequisites have been fulfilled.

6.2 We are authorized to make partial shipments and provide partial performance to the extent that such is reasonable for the customer.

6.3 Unforeseeable impediments, including acts of God, strikes, operational disruptions, such as power outages, shortages of raw materials and the like both at our facilities and those of our suppliers, will extend any delivery periods or deadlines accordingly, to include those that are binding.

6.4 The customer will grant a grace period of four weeks as prescribed by law in cases of delivery delays for which we bear responsibility. The customer can withdraw from the contract when this time limit has expired. The customer will pay for any partial deliveries made.

6.5 If delivery is agreed to be made in partial quantities or on a requisition basis, then we may withdraw from the contract or demand payment of the agreed price by providing the entire quantity of goods, should the customer fail to pay for or requisition the goods or partial quantities within a reasonable period of time as set by us.

6.6 In the event that we are responsible for non-compliance with binding delivery periods or deadlines, or if we delay or are in default, then the customer is entitled to claim compensation for loss occasioned by delay in the amount of 0.5% of the net order price of the delayed delivery or partial delivery for each full week of such delay, but not more than 5%. No further claims of any type are authorized unless the delay is caused willfully or through gross negligence. We assume no liability for any indirect consequential damage or loss, such as recourse claims by third parties.

7. Transfer of Risk

7.1 Unless otherwise agreed, we will decide both the transport means and routes, without assuming any responsibility for selecting the fastest or most-economical option.

7.2. Unless otherwise agreed, the risk is transferred to the customer when we turn the goods over to the transporting party. This also applies to partial shipments. Should the customer unjustifiably refuse to accept the goods, then the delivery will be delayed for reasons that are the customer's responsibility. Risk is transferred to the customer if the customer fails to requisition the call orders on schedule. If we store the goods at our location, then the customer is required to pay us the standard storage fee. The customer will bear the costs if the goods are stored at third parties.

7.3 The forwarder will be notified immediately to ascertain the facts should any goods become lost or damaged in transit.

7.4 We will arrange insurance coverage for the transport and for goods placed in storage only on request of the customer and insofar as such is agreed to in writing for each individual instance. The customer will bear the costs of the insurance.

8. Default in Acceptance

8.1 Should the customer be in default of acceptance, we will invoice staging costs in the amount of 0.5% of the value of the delivery for each full or part of a month provided the expense incurred is not verifiably less. We reserve the right to claim any additional substantiated costs.

8.2 If, after the expiration of a reasonable grace period coupled with a warning of refusal, the customer expressly states that it does not want to accept the goods or refuses the acceptance thereof, then we are authorized to withdraw from the contract and demand payment of damages for non-performance. We can demand 25% of the order price as compensation for non-performance provided the customer cannot furnish proof of a lesser loss. We reserve the right to assert claims for greater damages in the case of custom-made products or single-item production.

9. Retention of Title

9.1 The delivered goods remain our property until the customer has paid all the accounts owing from the customer. Checks will be considered as payment rendered only after the checks have cleared and funds have been collected against them. The customer may sell the goods to which we retain title (reserved goods) in the course of its ordinary business, unless the customer is in default of payment or has stopped making payments. The customer may neither pledge nor assign the reserved goods as security. Attachments or seizures of the reserved goods will be reported to us immediately and include a copy of the attachment order.

9.2 The customer may process the goods to which we retain title (reserved goods) in the course of its ordinary business, unless the customer is in default of payment or has stopped making payments. Should such processing be made, it is hereby agreed that we will acquire joint ownership of the new material arising from such processing in an amount corresponding to the value of our reserved goods in relation to the other processed objects.

9.3 Should the customer sell the goods, then the customer hereby assigns to us with immediate effect, and for the purpose of repaying all of our accounts receivable, the rights from its customers that it derives from the sale to include all ancillary rights and securities. Should we have only joint ownership of the sold goods because of their having been processed, then we will acquire only that share of the total receivables including ancillary rights and securities in the same relation to the total receivables as the value of our joint ownership is to the total value of the sold goods. We can require that the customer inform its customers about this assignment and give us all manner of information and records that are needed to collect against its customers.

9.4 If the customer's accounts receivable generated from the resale of our reserved goods or from the goods in which we have joint ownership are accepted on current account, then the customer hereby and with immediate effect assigns to us a claim to payment in the amount of the prevailing and confirmed balance, namely in the amount of our accounts receivable due from the customer. We hereby accept the aforementioned assignments.

9.5 The customer may collect the receivables that are assigned to us, unless the customer is in default of payment or has stopped making payments.

9.6 We agree at the request of the Customer to release our corresponding property rights should the value of the securities granted to us exceed our accounts receivable from the customer by more than 20%.

10. Liability for Defects

10.1 The customer is required to inspect the goods immediately after receipt. Notifications of defects and incorrect quantities must be made immediately upon discovery, but not later than seven days after receipt of the goods. The notification of hidden defects must be made not later than seven days after the defect is discovered. Notifications of defects are not valid after one year of receipt of the goods.

10.2 Claims by the customer for defects to the goods are limited to the right of rectification of the defect. The customer has the right to a reduction in price should the rectification of the defect fail. The customer is required in each case to return the defective goods to us for inspection.

10.3 The customer will have no further rights regarding the defect (withdrawal from the contract, damages, compensation for expenses) unless the defect was caused by willful acts or gross negligence on our part.

10.4 The limitation period for claims for remedy is reduced to one year. Excepted from this are claims for damages from injury to life, limb or health caused by gross negligence on our part or by willful acts or negligence on the part of our legal representatives or agents. Furthermore, this reduction in the limitation period does not apply for customer claims for damages caused by gross negligence or willful acts.

10.5 Liability for tortious injury to life, limb or health remains unaffected as does mandatory liability under the German Product Liability Act.

11. Applies only for orders placed with the steco-laser-technik division.

12. Place of Performance / Legal Venue / Applicable Law

12.1 All legal relationships between the customer and ourselves are subject to the laws of the Federal Republic of Germany to the exclusion of the "Uniform Law on the Formation of Contracts for the International Sale of Goods" and the "Uniform Law on the International Sale of Goods."

12.2 The place of performance for the fulfillment of customer obligations under these terms is Hamburg.

12.3 It is agreed that Hamburg will be the exclusive area of jurisdiction for all disputes to include those arising from checks. This stipulation applies provided the customer is a merchant or a legal entity under public law.

13. Savings Clause

Should individual parts of these general business terms and conditions be unenforceable or invalid, then the validity of the remaining provisions will not be affected.

Dated: 21 April 2008

TÜVRheinland®

Certificate

The Certification Body of
TÜV Rheinland Product Safety GmbH

hereby certifies that the organization

steco-system-technik
GmbH & Co. KG
Kollaustr. 6
22529 Hamburg
Deutschland

has established and applies a quality management system for medical devices for the following scope:

Design/development, production and sales of attachments and accessories adapted to the system for dental, oral, gnatho and facial medical science and implantable port systems
Additional production facility: see attachment

Proof has been furnished that the requirements specified in

EN ISO 13485:2003 + AC:2007

are fulfilled. The quality management system is subject to yearly surveillance.

Certificate Registration No.: SX 60021997 0001

An audit was performed. Report No.: 21124432 003

This Certificate is valid until: 15.07.2011

Akkreditiert durch
Zentralstelle der Länder für Gesundheitsschutz bei Arzneimitteln und Medizinprodukten
ZLG-ZQ-995.00.01-46

Certification Body

TÜV Rheinland Product Safety GmbH
TÜVRheinland®

Cologne, 21.07.2008

Dipl.-Ing. U. Frenkert

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